

Peer Interaction Opportunities for Non-Native-Speaker-of-  
English International Students in Postgraduate Courses of a  
NZ University

By

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## **ABSTRACT**

In educational/academic contexts, participation in spoken interaction has been drawing attention as a potential source of problems for second language learners (Ferris & Tagg, 1996). Many scholars have acknowledged a need for students to participate actively in spoken communication in the higher education contexts (e.g. Mason, 1995) and also identified influential factors, including language proficiency (e.g. Xu, 1991) and socio-cultural incongruence (e.g. Lee, 2009), for the participation of non-native-speaker of English international students in their new educational practices through oral communication. While postgraduate students are assumed to have opportunities for educational interaction, the nature of activeness and collaboration in postgraduate educational practices as well as expected communicative competence need more attention. In the current study, peer interaction was conceptualized as a focal point that would help understand students' active and collaborative learning in postgraduate education.

The current study explored the processes of the creation and utilization of educational peer interaction which are afforded and constrained by contextual factors. An ethnographic approach, inspired by the development of Needs Analysis in the English for Academic Purposes research tradition and Ethnography of Communication (Gumperz & Hymes, 1972), was adopted. Specifically, insider perspectives of lecturers, local students, native-speaker and non-native-speaker international students, from three disciplines, namely, Applied Linguistics, Engineering, and Business School, were investigated through semi-structured interviews, triangulated with non-participant observations and Floor Analysis (Edelsky, 1981) of audio-recorded interaction among students. Particular foci are on what types of peer interaction opportunities are created and utilized in postgraduate courses, what motivations are behind the creation and utilization of peer interaction opportunities for postgraduate learning, and how postgraduate students use communicative competence in peer interaction.

Findings show that different types of peer interaction are situationally created by lecturers as well as students under the influences of multiple contextual factors, including learning objectives, pedagogical belief, and physical classroom settings. The findings also confirmed that students bring into postgraduate educational practices multi-faceted personal resources, including linguistic competence, social relations, domain knowledge, and previous educational experiences, which could accommodate or impede their participation in peer interaction. Also, students were found to utilize peer interaction opportunities to collaboratively

develop their learning of the target academic knowledge while actively and interactively deploying a wide range of communicative functions, such as utterance completion, repetition, summary, validation, and information addition/editing. Pedagogical implications from this study can inform EAP practices, in the sense that EAP learner international students should be made aware of the interactive nature of learning in the target educational contexts, what factors could influence their interaction, and what sorts of communicative competence are needed in postgraduate environments where students are expected to actively and collaboratively engage in the development of their own learning.

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## **ABBREVIATIONS USED IN THE THESIS**

EAP	English for Academic Purposes
ESP	English for Specific Purposes
NNSE	Non-native-speaker-of-English
NSE	Native-speaker-of-English
L1	First language
L2	Second, third, or foreign language

# **Chapter 1: Introduction**

## **1. Introduction**

This chapter aims to provide the contexts, summary, and rationale for this research into peer interaction in postgraduate contexts. Firstly, the background information of problems around peer interaction and the researcher's own personal experience of difficulties with peer interaction in postgraduate contexts are presented. Secondly, past literature is briefly summarized for the readers to identify gaps in the body of established relevant knowledge and understand how the current research addresses the identified gaps. Thirdly, an overview of the research follows, in terms of objectives, methodological framework, brief descriptions of findings and discussions. Fourthly, the significance of the current research is stated in terms of practical applications. Lastly, the structure of the current thesis is outlined.

## **2. Background**

The number of international students in Main English-Speaking Destination Countries (MESDC), such as New Zealand, soared around the beginning of this century (Healey, 2008), and subsequently, the number of international students kept growing globally in the 2000-2011 period, according to OECD and UNESCO Institute of Statistics data (Ministry of Education, 2011). New Zealand saw a sharp increase in terms of the market share of foreign students in tertiary education from 0.4 to 1.7 percent during the same period of time (Ministry of Education, 2011), with international postgraduate students steadily rising in number (Ministry of Education, 2015) even against negative factors such as the worldwide economic downturn after 2008 and the Christchurch earthquake in 2011.

With this demographic background, the role of the English for Academic Purposes (EAP) research in English learning and teaching is growing accordingly. EAP research has been concerned with communicative events international students are likely to encounter (Ferris & Tagg, 1996 b; Ferris, 1998:), communication skills required in communicative events in the

target educational practices (e.g. Jacobson, 1986; Basturkmen, 1998; Farr, 2003) and contextual information relevant to how the skills are used in communicative events (e.g. Leki, 2001; Jacoby & Gonzalez, 1991; Morita, 2000, 2004; Guo & Lin, 2016). It also has shown ways in which non-native-speaker-of-English (NNSE) international students experience communicative situations and events where the required/expected communicative skills are required/expected to be used (e.g. Leki, 2001; Morita, 2000, 2004; Kim, 2006). Numerous investigations have revealed challenges NNSE international students face in communicative situations such as classroom presentations and interaction in laboratories, (e.g. Morita, 2000; Jacobson, 1986). In communicative events involving peer interaction, such as a group discussion and collaborative work, NNSE students were found to experience difficulties with oral communication, involving linguistic, socio-cultural, and disciplinary factors (e.g. Jacobson, 1986; Ferris & Tag, 1996; Leki, 2001; Morita, 2004; Lee, 2009; Kim, 2006).

My experience of classroom peer interaction also confirms how NNSE international students could experience difficulties when they tried to socialize themselves into the target educational practices. As a native-speaker-of-Japanese international student, I came to New Zealand for a postgraduate program and participated in pre-enrollment EAP course as a requirement. After spending three months in the EAP program, I enrolled in a Master's program and there repeatedly found myself facing unexpected challenges in interaction opportunities in Master's courses. Local students seemed to be very actively initiating and participating in discussions in a whole class or small group setting, and perhaps because of their sheer activeness, their turn-takings tended to be made too quickly and numerous for me to catch up with. In this very active learning environment, I always had hard time following the development of a discussion, not unusually ending up missing points made by local students.

The interaction pattern I experienced across postgraduate classrooms in NZ generally felt very different from what I experienced in any secondary and undergraduate classroom in my own country as well as in the pre-enrollment EAP classroom in NZ. In the EAP course, I was comfortably engaging in any task together with other NNSE international students and rarely had such difficulties as in my postgraduate courses. Looking back, I strongly believe that preparation with information as to how differently native-speaker and NNSE students could behave and interact in educational activities as well as what could cause the difference would have been useful and meaningful for me as an EAP learner who aimed to be socialized into a new



educational culture. This perspective, gained from my personal experience as an NNSE international student, motivated this research.

### **3. Research Context**

While EAP research has tended to be significantly oriented towards language use in written communication (e.g. Ferris, 1998; Swales, 1990), researchers are also more and more interested in speech in academic/educational contexts (Rowley-Jolivet & Carter-Thomas, 2005; Simpson & Swales, 2001) and knowledge has been accumulating as to oral communication in higher education and difficulties NNSE international students can feel in participating in academic oral communication (Duff, 2002; Morita, 2000). In this context, a range of communicative event types have so far been identified and become objects of research interest, which include lectures and interactive lectures (Evans & Green 2007; Csomay, 2006, 2007), in-class group work or discussion and out-of-class group work (Lee 2009, Furneaux et al., 1991; Kim, 2006), oral presentations (Zareva 2009; Morita 2000), and tutorial and meetings (Boyer et al., 2008; Farr 2003; Limberg 2007; Reinhardt 2010). These events were often investigated using conceptual and procedural frameworks, such as needs analysis (Ferris, 1998; Ferris & Tagg, 1996 a), discourse analysis (Busturkmen, 1998; Tin, 2003), language socialization (Jacoby & Gonzalez, 1991; Morita, 2000, 2004), and ethnography (Northcott, 2001), depending on the research objects they focused on.

Among these identified speech events, whole class discussions and group discussions have gathered attention as a venue of the potentially complicated conflict between contextual needs and NNSE students' existent competence and resources. NNSE students' experiences in these communicative events have been investigated in terms of a range of contextual and situational factors that could impact on their participation. For example, Leki (2001) found that the dynamism of peer interaction can play out as a function of students' language proficiency and social relationship and that NNES students may fail to manage social/academic interaction successfully due to their limited linguistic and social resources. Morita (2004) explored international postgraduate students' negotiation of their competence and identity in open-ended discussions and described NNSE students' participation as situated in a particular context that

involves a wide range of factors, including socio-cultural, educational, and interpersonal factors. Guo and Lin (2016) highlighted the process of students' socialization into the target disciplinary discourse through participation in oral discussions, and discussed their use of domain knowledge and communicative competence in relation to expert discourse. Lee (2009) identified strong impacts of sociocultural factors and educational experiences on Korean international postgraduate students' participation in classroom discussions. When combined, these investigations contribute to the holistic understandings of potential factors that could play out in the way NNSE students behave in an interactive situation where active participation is expected.

The above-mentioned research into academic peer interaction, however, tended to take the target educational practices as a priori and focused on NNSE students' experiences, without a particular interest in understanding what the practices could mean to local NS students and lecturers and how they might create the practices. While some research, such as Morita (2004) and Lee (2009), suggests NNSE international students' educational experiences in their home country as a factor that can impact on their behavior in new educational environments, the nature and creation of educational practices and interaction opportunities in the new educational environments have not been particularly focused on. For example, the insider perspectives of local students who actively contribute to the educational practice have not been heard in previous research into academic peer communication. There needs to be research to inform NNSE international students more as to how the educational practice and interaction opportunities are constructed and maintained by all the stakeholders involved, including the lecturers, local students, and also international students. Information available from this line of investigation will be useful for NNSE international students who aim to overcome differences in educational practice and strategically socialize themselves into the target learning environment. For example, NNSE international students might be deeply accustomed to the traditional lecture style learning in their home countries, so that they might not be able to see easily what educational motivations would be behind the sort of communicative events that require students to actively interact with the lecturer and among themselves. Knowledge on how and under what conditions the lecturers and local students are motivated to create and utilize educational peer interaction will be greatly informative for those international students who aim to adapt to new educational practices in the target situation.

There has been a suggestion that postgraduate course learning can be characterized by ample opportunities and requirements for students to participate in oral communication (Basturkmen, 2002; Kim, 2006; Ho, 2011). The postgraduate educational practice is thus considered to require students to contribute more actively to its co-construction than undergraduate level education. In spite of this general understanding of the required activeness for postgraduate education, information as to students' collaboration in postgraduate learning is still limited, typically not receiving focused attention (e.g. Tin, 2003; Morita, 2004; Guo & Lin, 2016). A novel research design is needed to address the nature of postgraduate educational practices in terms of the way students actively and collaboratively construct knowledge and skills through interaction among themselves.

#### **4. Overview of the research**

To fill the identified gaps mentioned in the previous section, the current research aims to describe the nature of postgraduate educational practices in which the lecturers and students conceptualize peer interaction as beneficial learning channels. By focusing on the processes of the creation and utilization of peer interaction opportunities, this study investigates how the active and collaborative learning environments can be co-constructed by the members of the educational community. Specifically, three aspects of the research target are focused on. (1) Peer interaction across three disciplines (Applied Linguistics, Engineering, and Business School) is investigated in terms of whether different types of peer interaction can be identified in postgraduate educational practices and how they are differentiated. (2) Peer interaction is approached with a focus on what motivations are to be found behind its creation and utilization, and factors are sought that can play out both on the educators and students' sides across disciplines. (3) Peer interaction is examined to explore what sorts of communicative functions are actually used in peer interaction, and findings are examined in light of the realization of active and collaborative learning. These three aspects are expected to collectively help understand the postgraduate educational practices as well as the potential needs and requirements when NNSE international students aim to socialize themselves into the new practices.

Methodologically, an ethnographic approach is taken with the aim of describing postgraduate educational practices in a “thick” way (Geertz, 1973). In the EAP research tradition, this approach has been influential particularly for the exploration into students’ and lecturers’ perceptions of their experiences in the target language use situations (e.g. Jacobson, 1987; Ramani et al., 1988; Northcott, 2001; Morita, 2000, 2004; Lee, 2009). The current research follows this tradition to reveal the insiders’ perspectives of how peer interaction can constitute the medium of learning in postgraduate education. The findings of ethnographic observations and interviews are then triangulated with the findings from the analysis of “floors” (Edelsky, 1981), which is a discourse analysis technique with an attention to meaning makings across turns and speakers. How activeness and collaboration can be realized in the forms of students’ communicative functions is explored in the analysis of the discourse data.

## **5. Significance of the research**

The current investigation has a practical orientation, motivated to inform EAP learning and teaching. Regarding its objective of facilitating NNSE international students in their socialization into new educational practices, the study is of significance in the following ways:

- (1) The findings from this research provide in-depth information of postgraduate educational practices as active and collaborative learning environments. EAP learners and practitioners can utilize this insight as a driving principle to organize and design learning materials and curricula.
- (2) This study presents a framework of classifying communicative events as a way to operationalise active and collaborative learning in higher education, as well as types of collaboration in relation to academic speech events. EAP curriculum designers can address the authenticity of speech tasks in reference to this conceptual framework. Also, this framework could be instrumental for Needs Analysis to explore the learners’ needs in the target situation in terms of speech events and interaction opportunities.
- (3) The findings of the study may also inform EAP learners and practitioners of types of communicative competence, together with their contexts of use, which EAP learners are likely to

encounter and be expected to use in postgraduate educational environments where active and collaborative learning is practiced.

(4) The findings as to the insider perspectives of the creation and utilization of peer interaction help EAP learners understand the target language use situations more deeply and become more motivated in authentic tasks. Raised awareness and heightened motivation is expected to facilitate EAP learners in their socialization into the target community of practice as well.

## **6. Outline of the thesis**

This thesis contains nine chapters. This chapter, Chapter 1, has introduced the contexts and rationale of the study and provided an overview of its general objectives and methodology. Chapter 2 critically discusses relevant previous literature to clarify the research context, drawing on literature from EAP, Needs Analysis, Ethnography, and active and collaborative learning. Chapter 3 provides the information of the methodology used for the current research. The processes of the multi-method ethnographic approach are detailed. Chapter 4 describes what types of peer interaction were found across disciplines through ethnographic investigations and the characteristic nature of each disciplinary practice is explored. Chapter 5 presents the findings as a result of the triangulated analyses between data from observations and interviews with lecturers. The focus is on what factors can impact on the way the lecturers set up different communicative events and conditions for peer interaction opportunities. Chapter 6 deals with the findings from the triangulation of observations and interviews with postgraduate students. The results reveal how postgraduate students utilized the conditions for peer interaction set up by the lecturers and what factors are behind their use of peer interaction. Both local and international students' perceptions are described. Chapter 7 provides the description of how postgraduate students can use their active and collaborative learning resources in a group discussion activity. A sample of their discourse is analyzed using the proposed floor analysis method. Chapter 8 discusses the interpretation of the findings, in relation to relevant arguments in the previous literature. The nature of postgraduate educational practices is argued to be the co-construction of active and collaborative learning environments that is based on the lecturers' provision of learning conditions and students' agency to negotiate the conditions. Chapter 9 concludes the

thesis with a summary of findings and puts forward implications for EAP learners and practitioners.

## **Chapter 2: Literature Review**

This chapter aims to establish relevant and rigorous research questions that address what will help understand the nature of postgraduate peer-to-peer communication and resources for participation in it. Due to the goal of the current research as informing English for Academic Purposes (EAP) programs intended for in-service or pre-service postgraduate students, this chapter first situates the research in the contexts of EAP research tradition and reviews relevant literature on academic oral communication that involves non-native-speaker-of-English (NNSE) students. This section thus establishes the need to explore the nature of postgraduate educational practices that NNSE international students might not be familiar with. Study level and discipline are then raised as variables of educational practice to be investigated. Next, literature on active and collaborative learning from Education research is reviewed to establish conceptual frameworks that can capture the nature of the postgraduate educational practices involving peer interaction opportunities. Lastly, the chapter addresses ethnographic approach as methodology to make this investigation into particular educational practices feasible. The chapter concludes by presenting research question for this thesis.

### **1. Oral communication research in EAP**

Peer interaction has received attention as a part of NNSE international students' experiences in the higher education contexts of English speaking countries and studied in the EAP research field (e.g. Micheau & Billmyer, 1987; Jacobson, 1986; Basturkmen, 1995, 1998; Leki, 2001; Tin, 2003; Morita, 2004; Vickers, 2007; Lee, 2009; Coward & Miller, 2010). Following this line of investigations, this research aims to construct knowledge that will be useful in helping EAP learners develop the understanding and competence in educational peer interaction at postgraduate level. In this section, first, EAP is presented as the research field that underpins the objective of this research. Second, peer interaction is identified as the research target in relation to academic communicative events in previous literature. Third, previous approaches to investigating peer interaction are critiqued and research into educational practice is

proposed as a new approach. Lastly, contextual variables are discussed to operationalize research into educational practice.

## **1.1 Definition and perspectives of EAP**

The current research is aligned with the orientation of EAP towards the practical application of generated knowledge to English learning, which Hyland and Shaw (2016) point out when they summarize EAP;

[I]n essence, research-based language education and the applied nature of the field has been its strength, tempering a possible overindulgence in theory with a practical utility. (p.1)

In this close relationship between research and pedagogy, EAP is basically characterized by sensitivity to contextual use of language (Benesch, 2001). With his attention to education as a contextual factor, Jordan (1997) cites ETIC (1975)'s definition of EAP, which says:

EAP is concerned with those communication skills in English which are required for study purposes in formal education systems. (ETIC, 1975, in preface, cited in Jordan, 1997, p. 1).

This understanding of EAP was later developed by Hyland and Hamp-Lyons (2002) in their definition of EAP, with a slightly different orientation:

EAP means grounding instruction in an understanding of the cognitive, social and linguistic demands of specific academic disciplines. This takes practitioners beyond preparing learners for study in English to developing new kinds of literacy: equipping students with the communicative skills to participate in particular academic and cultural contexts. (2002, p. 2)



Hyland and Hamp-Lyons's definition turns their eye towards the academic domain and highlights the complexity of contextual factors surrounding academic practice, with attention to within- and beyond-academia variability. This definition by Hyland and Hamp-Lyons can thus motivate researchers to investigate academic communication with more focus on such variables as disciplines and cultures, while the element of communicative skills "for study purposes in formal education systems" in the ETIC definition is backgrounded. The current research aims to throw light once again on the aspect of academic communication as a learning tool for students, rather than as a learning goal. From this perspective of EAP, this research explores educational environments where peer interaction is created and utilized as students' essential learning tool.

## **1.2. EAP oral communication research and peer interaction as a research target**

To the best of the knowledge of the current researcher, no investigation has been conducted in the EAP research field to explore higher-educational environments with a focus on peer interaction as students' learning tool. This suggests that the current research needs to establish a new approach to peer interaction as a research target. The following review part addresses how the current research can relate to the EAP research tradition with a new approach to investigating peer interaction.

### **1.2.1. Identified types of oral communicative events involving peer interaction**

Scholars say that EAP research has tended to show significant orientation towards language use in written communication (e.g. Ferris, 1998; Swales, 1990) and that large effort has been made to identify and analyze written communication in terms of different genres (Ferris, 1998; Swales, 1990; Zareva, 2013; Brooks & Swain, 2014). On the other hand, more and more researchers also have interest in oral communication in academic/educational contexts (Rowley-Jolivet & Carter-Thomas, 2005; Simpson & Swales, 2001). In this research field, understandings have been developing as to the challenges that face NNSE international students when they get involved in particular communicative situations. For example, as scholars in the Education research field also suggest (e.g. Ramburuth & Tani, 2009, Remedios et al., 2008), EAP researchers have found difficulties NNSE students can have in learning interactively (e.g.

Aguilar, 2016; Micheau & Billmyer, 1987; Jacobson, 1986; Leki, 2001; Tin, 2003; Lee, 2009). Aguilar (2016) states that international students from East Asian countries have a tendency to find it difficult to participate in the seminar type of learning situation, where more active interaction is expected or required. This line of investigation seems to assume that learner difficulties might vary in terms of different learning activities (Basturkmen 2016, p.156) and thus that each communicative event deserves distinctive attention.

So far a range of speech events have been identified and become objects of research interest. The following table shows selected examples of different spoken communicative events dealt with in previous EAP related literature (Table 2.1):

*Table 2.1: Spoken communicative events in EAP research*

<b>Event Type</b>	<b>EAP Research</b>
Lectures	Ferris, 1998; Ferris & Tagg, 1996 a, 1996 b; Csomay, 2006, 2007; Evans & Green, 2007; Lee, 2008
Interactive lectures or whole class discussions	Ferris, 1998; Ferris & Tagg, 1996 a, 1996 b; Lee, 2009; Csomay, 2006, 2007; Lee, 2009; Micheau & Billmyer, 1987; Morell, 2007
In-class group work or discussion	Ferris, 1998; Ferris & Tagg 1996 a, 1996 b; Lee, 2009, Basturkmen 2003; Tin, 2003 ; Leki, 2001; Guo & Lin 2016
Out-of-class group project	Ferris, 1998; Ferris & Tagg, 1996 a, 1996 b
Oral presentation or student seminar	Ferris, 1998; Ferris & Tagg, 1996 a, 1996 b; Zareva, 2009, 2013; Morita, 2000

Seminar Discussion/Q&A	Basturkmen, 1998; Coward, 2002; Tracy & Naughton, 2009
Laboratory work	Jacoby & Gonzales, 1991; Jacobson, 1986

Each communicative event in the table above implies its own configuration of how students are allowed, or not allowed, to interact with the lecturer and other students in the event. In the lecture, for example, students are basically supposed to listen to the lecturer, while in-class group work/discussions expect students to talk within their own group. From this view, some of the communicative events, such as in-class group work and out-of-class group projects, are designed to require students to interact directly among one another. Peer interaction is expected to keep occurring naturally in such events. Other communicative events, such as interactive lectures, whole class discussions, and Q&A following the student seminars, are likely to include talks among students, as well as talks between the presenter student and the lecturer. Each identified communicative event is thus connected to how differently interaction can occur.

### **1.2.2. Issues around the identification of speech events involving peer interaction**

It should be noted, however, that the identified communicative events in Table 2.1 are not free from ambiguity in terms of their scopes and boundaries. For example, Aguilar (2016) captures seminars as an academic spoken genre and raises issues around the ambiguous definition of “seminar” on the ground that a seminar event can typically contain sub-events within itself, namely, a presentation segment where the speaker talks and the audience listens and a discussion segment where the speaker and audience interact with one another. It is also pointed out that the seminar discussion can be used as an umbrella term covering academic group interaction in general (Aguilar 2016, p.336).

Variability of each communicative event has also to be considered in light of participants’ agency. To take a whole class discussion for an instance, this event has some variability in terms of students’ participation in the sense that it is up to students whether they

may or may not create and utilize interaction opportunities and what type of interaction they may need. If all the students just draw upon the lecturer as the only information source and do not see their peers' potential as information sources during the discussion, the discussion may keep bouncing back and forth between the lecturer as a moderator and students without any talk among students themselves. On the other hand, students may have an interest in what the current speaker student is saying, wondering if they could have more information on the information, and take initiatives to open up peer interaction by directly asking the student to elaborate more. These two scenarios could be differentiated as two distinctive types of speech event.

This agency-driven variation of classroom talk received Lemke's (1982) attention. Lemke terms students' peer interaction occurring in the midst of the teacher-led whole-class interaction as "cross-discussion". He defines it as "dialogue between students in which teacher is not a constant intermediary" (p.70). He also observed that it occurs rarely "as part of the public discourse of the science classroom" at secondary level education and that it usually occurs in the way that would not be accepted as the public discourse. Cazden (1988) observed that this type of peer interaction occurred often in a secondary-level integrated English and social studies course. The nature of a communicative event is thus strongly influenced by the stake-holders' implementation of initiatives.

With the above-mentioned ambiguity and variability in consideration, I hypothesize here that peer interaction might be occurring in different ways in different oral communicative events for learning (e.g. a whole class discussion, in-class group discussions, out-of-class team project assignments). This hypothesis entails that the identification of peer interaction opportunities can be approached in relation to communicative events and that a typology of peer interaction can be made in relation to different communicative events. For example, Lemke's "cross discussion", mentioned above, may be captured as one type of peer interaction and related to the teacher-led class talk as a communicative event.

This identification of peer interaction in relation to communicative events is particularly necessary for the current research. Peer interaction in educational contexts is a construct that is thought to be methodologically difficult to deal with in a direct way. Peer interaction can occur unpredictably in some cases depending on students' exercise of their agency, as mentioned above in reference to Lemke (1982) and Cazden (1988). Also, there is a possibility that aspects of peer

interaction might be dismissed as insignificant or left unnoticed from students' as well as educators' perspectives, depending on their conceptualization of learning and teaching. Communicative events, such as a whole class discussion or a group discussion, on the other hand, are likely to be much easier for research participants to conceptualize. Since communicative events are known to be valid as a basic analytical unit in terms of methodological robustness and consistency (Saveille-Troike, 1982), it is reasonable and practical to investigate how differently peer interaction opportunities occur in relation to such different communicative events as shown in Table 2.1.

### **1.2.3. Approaches to academic peer interaction**

From among communicative events potentially involving peer interaction, EAP researchers into peer communication have focused on such communicative events as a whole class discussion (Morita, 2004; Lee, 2009), a seminar discussion (Basturkmen, 1995, 1998), a group discussion (Leki, 2001), laboratory work (Jacobson, 1986), out-of-class group work (Vickers, 2007). With differences in the target communicative event, these investigations can be categorized into two distinctive approaches (Morita, 2004). One approach is oriented towards what students are required and expected to know or do, or what Morita (2004) calls "product-oriented research" in the academic socialization paradigm. According to Morita (2004), the major pillars of this approach are Needs Analysis research (e.g. Ferris & Tagg, 1996 a, 1996 b) and Genre research (e.g. Swales, 1990). In EAP oral communication research, the former has mainly been employed to identify speech events and communicative competence required for the events. More specifically, in EAP peer interaction research, Basturkmen (1995, 1998) and Jacobson (1986) can be considered to belong to the needs analysis approach. Genre research in EAP oral communication research, on the other hand, has been limited to the monologue type of speech (e.g. Zareva, 2013), and not used for the interactive type of communication. The other approach to EAP research is "process oriented" (Morita, 2004), with a focus on how NNSE students get through the process of socialization into academic and educational practices. Morita (2004) and Vickers (2007) claim to adopt this approach, and I interpret Leki (2001) and Lee (2009) to be very similar to this category since they also focus on how NNSE students experience challenges in the process of socialization into

a new learning environment. To avoid confusion in definition between Morita's terminology and my interpretation, these four investigations in this thesis are collectively called "student experience focused approach". The following two subsections address in detail how needs analysis approach and student experience approach are employed for EAP peer interaction research.

#### 1.2.3.1. Needs Analysis approach to peer interaction

EAP is strongly oriented towards English learners' needs in the target academic situation as its umbrella field ESP (English for Specific Purposes) is. Most EAP/ESP definitions recognize this inherent nature of their research and practice (e.g. Munby, 1978; Hyland and Hamp-Lyons, 2002; ETIC, 1975, cited in Jordan, 1997; Coffey, 1984, cited in Turner, 2004). Needs Analysis is then considered to be an essential part of EAP/ESP practices and "the starting point for devising syllabuses, courses, materials and the kind of teaching and learning that takes place" (Jordan, 1997, p.22).

Hyland (2006) points out the inherent multi-aspectness of needs analysis, and a range of analytical approaches have been proposed in the EAP/ESP needs analysis tradition. With some variation in terminology across theorists (e.g. Jordan, 1997; Basturkmen, 2010; Flowerdew, 2013), those approaches have been conceptualized into several categories, including target situation analysis, present situation analysis, and means analysis. In this review, target situation analysis is taken up as the most relevant type of needs analysis to the current research.

Target situation analysis is the investigation into "what learners are required to do with the foreign or second language in the target situation" (Flowerdew, 2013, p.326), and its analytical units can be tasks, activities, and skills (Basturkmen, 2010). Target situation analysis can also be accompanied by discourse analysis to explore the target language use in relation to the identified tasks, activities, and skills, to identify required linguistic and/or functional aspects. In EAP written communication research, Benesch (2001) introduces, as its earliest seminal works, John's (1981) survey of the faculty's perceptions of relative importance among four skills, and Horowitz's (1986) identification of academic writing tasks through the investigation of writing assignments.

In EAP spoken communication research, on the other hand, Ferris (1998) and Ferris and Tagg (1996 a, 1996 b) employed a survey-based needs analysis and found NNSE students' and lecturers' perceptions of the requirements and difficulties of aural/oral tasks in academic contexts. Basturkmen (1998) employs discourse analysis and identifies skills at eliciting information in seminar discussions as the target communicative events, unpacking the complexity of a turn when students strategically try to elicit information from their peers. Also, Jacobson (1986) finds Physics students' use of "strategic competence" (Canale & Swain, 1980), which is "knowledge of the way in which language is used to communicate an intended meaning or to compensate for miscommunication" (p.173). Students in Jacobson's study use a range of strategic competence in their physics laboratory, which include (a) evaluating and selecting needed information, (b) synthesizing information from multiple sources, (c) applying information to differing situations, and (d) establishing social relationships with peers. Basturkmen's (1998) and Jacobson's (1986) studies address how students create peer interaction opportunities as well as what communicative skills they actually draw upon to utilize the opportunities for their learning.

#### 1.2.3.2. Student experience approach to peer interaction

As stated in the previous section, student experience approach is a category proposed in this current study for investigations into how NNSE students experience the requirements and expectations in the target communicative situations. This category includes what Morita (2004) terms as "process oriented" research, which is an inquiry into "the *situated* or socially and temporally constructed process by which newcomers become socialized into academic discourses at various levels of schooling" (Morita, 2004, p.574). As a study taking this approach in EAP peer communication research, Morita (2004) investigates how EAP learners negotiate their participation and identity in their new educational environments of a Canadian university, drawing upon the framework of "community of practice" (Lave & Wenger, 1991). Also, Vickers (2007) explores the socialization process of the electrical and computer engineering students into the expert engineer identity mediated by interaction in their team meetings. Guo and Lin (2016), in the English-medium instruction context in Taiwan, adopt this approach and identify Teaching

English to Speakers of Other Languages (TESOL) students' socialization process through group discussions into their disciplinary way of speaking.

While socialization-process-oriented research assumes the impact of the disciplinary way of communication on students' learning behaviors, the other thread of student experience approach is characterized by its aim to identify influential factors on how NNSE students participate in and experience the target communication. For example, a number of researchers and theorists have identified the lack of language proficiency as a negative impact on NNSE students' effective oral communication in educational contexts (e.g. Stephens, 1997; Jones, 1999; Cheng, 2000). Leki (2001) identifies how social relationships formed among students can influence NNSE students' ability to participate in collaborative learning. Lee (2009) on the other hand finds that multiple factors, including cultural, individual, and situational, are intertwined and impact on NNSE Korean students' participation in class discussion, and that their culture particularly constrains their way of participation in the educational practice in the U.S.

#### 1.2.3.3. Need for another research approach to peer interaction

Knowledge available from the needs analysis approach and the student experience approach, is quite informative in the sense that the two approaches combined will help understand the nature of participation in peer interaction in the target academic context. EAP learners and practitioner can gain knowledge through the two approaches regarding how participation in peer interaction can be dynamic and complex processes under multiple influential factors and require students to use communicative skills appropriately to develop their own learning.

On the other hand, these two approaches do not construct peer interaction as an educational tool in a clear way. The nature of educational practice in the target situation is not highlighted either. Communicative events in the target educational situation are taken as a priori and not investigated in terms of why and how they are created. Among the EAP peer interaction investigations, for example, Lee (2009) found the previous educational experience of Korean international students to the U.S. as an influential factor on their behaviour in the classroom interaction. However, Lee found in a general way that talk and interaction are not valued in the



educational practice in Korea, not specifically focusing on how talk and interaction are valued in the target educational practice in the U.S. Due to the lack of conceptualizing peer interaction as an educational tool, these two approaches do not clearly address how NNSE students might experience differences in educational practices and how those differences could impact on their behaviour in peer interaction. To address these questions, a new research design is needed. This new approach should be oriented towards the nature, meaning, and purpose of peer interaction as a learning or educational tool. With this purpose-oriented approach to peer interaction, researchers can explore why and how peer interaction can occur in given educational practices as well as what the nature of the educational practice is that makes peer interaction meaningful for the members of the practice. Investigations with this approach will inform EAP learners and practitioners more of peer interaction in the target educational practices and thus of the target educational practices that EAP learners socialize themselves into.

It should be emphasized that this third approach is complementary to other two approaches, not exclusive of them. This means that, together with needs analysis and student experience ones, the purpose-oriented approach can constitute a component of a holistic, multi-angle investigation into communicative events. This multi-faceted type of investigation into peer interaction will inform EAP learners and practitioners regarding what types of peer interaction exist in an educational practice, how they occur in the educational practice, what communicative skills are expected in peer interaction, and how NNSE students experience them as a learning tool.

#### **1.2.4. Study level and discipline; variation in educational practice**

In exploring the educational practices for peer interaction opportunities, key contextual variables need to be defined. Two variables will deserve particular attention for this study, which are the study level and disciplines. This study will examine how these variables will influence the occurrence of peer interaction opportunities in the target educational practices. The following sub-section addresses how previous literature concerning academic oral interaction has dealt with these two variables.

#### 1.2.4.1. Postgraduate educational environments

Basturkmen (2016, p.156) says that communicative events containing dialogic classroom interaction tend to be happening more frequently at higher levels of university learning than at lower levels of higher education. This tendency suggests that the postgraduate study is likely to have more classroom interaction than the undergraduate study. So far, many EAP oral communication investigations have been conducted in the contexts of postgraduate learning (e.g. Basturkmen, 1998, 1999; Coward, 2002; Farr, 2003; Jacoby & Gonzales, 1991; Kao & Gansneder, 1995; Kim, 2006; Micheau & Billmyer, 1987; Morita, 2000, 2004; Northcott, 2001; Guo & Lin, 2016; Lee, 2009). These pieces of research cover major interactive events, such as interactive lectures, seminar discussions, tutorials, and group discussions, and mostly have a clear focus on a single communicative event type as the target language use (see Table 2.1). This way of contextualizing research in the postgraduate education, however, does not necessarily imply that these investigations consider how the postgraduate study level relates to a communicative event as the research target. These investigations are not particularly designed to explore how the study level work as a variable. This void should be addressed if further understanding is to be gained of language use in postgraduate education as the target situation. The current research has a particular research interest in how factors concerning postgraduate level education might afford and constrain the nature of its educational practice, choice of communicative events, and participative behaviors of students.

#### 1.2.4.2. Disciplinary education

Together with study level, academic discipline is also considered in the current research design. Discipline has been drawing attention as an essential concept for EAP research and practices to conceptualize an aspect of within-academia variation. Hyland (2012) defines discipline as “a common enough label, used to describe and distinguish topics, knowledge, institutional structures and individuals in the world of scholarship” (p.23). Basturkmen (2016) points out that disciplinary use of language in interaction has not been much investigated, while disciplinary differences in writing have drawn a greater attention. This might be partly because

EAP research has had a strong orientation towards the identification of linguistic features of academic language use through established procedures such as corpus or genre approaches (e.g. Simpson, Briggs, Ovens, & Swales, 2002; Coxhead, 2000; Swales, 1990) and because linguistic features of interactive spoken communication are methodologically less easily accessible for research than the written discourse.

Among those interested in disciplinary language use in academic spoken communication, most of the research (e.g. Ho, 2011; Morita, 2000, 2004; Vickers, 2007; Guo & Lin, 2016; Chang & Kanno, 2010; Zappa-Hollman, 2007) takes on a discipline-specific communication through the conceptual lenses of community of practice (Lave & Wenger, 1991) and language socialization (Schieffelin & Ochs, 1986). Some of the investigations have dealt with spoken interaction (e.g. Morita, 2004; Vickers, 2007; Ho, 2011, Guo & Lin 2016). For example, Vickers (2007) explores group meetings and group project work to describe the process of how novice Engineering students are socialized into the disciplinary community of engineering, constructing a competent, expert engineer identity. Even though community of practice and language socialization are validly instrumental as research frameworks to look at one dimension of educational spoken communication, Ashwin (2012) and Solomon (2007) have pointed out that there is a risk in using community of practice as a conceptual framework in a single-sighted way for potentially multi-dimensional practices of education. They emphasize that academics and students alike are likely to belong to multiple communities of practices that might conflict with one another in terms of their perceived value systems.

For example, Solomon (2007) explored mathematics undergraduate students' modes of community belongings and described how a mismatch can occur "between the values of the wider community of practice of mathematics and those of the immediate undergraduate and classroom communities of practice" (Solomon, 2007, p.88). In Solomon's research, an undergraduate student was found to be less marginalized from the disciplinary community of mathematics than from her immediate undergraduate classroom community. This student's personal learning system was more oriented towards mathematics experts' value system, which emphasizes the processes of proving rules, not that of her undergraduate classroom community which emphasized getting right answers speedily by following rules without having to understand their proof processes. Solomon's data clearly shows that even in the context of

disciplinary education, students can create their own learning space, based on their use of agency, with motivations potentially distinctive from disciplinary learning objectives.

Given this potential complexity of disciplinary education, there needs to be an approach that will be sensitive to the possibilities of both across- and within-discipline variability of the target educational practice and communication. Educational practices, including the choices of communicative events and the compositions and meanings of communicative competence, might be different across disciplines and even within a discipline. One way to incorporate across-discipline variability into research design is to define discipline as a variable and compare across different disciplines. In this way, it will be possible to look at how each disciplinary motivation or learning objective might impact on the nature of educational practice, specifically in this research, the occurrence of peer interaction as a learning channel. Naturally, caution is needed not to adopt disciplinary differences a priori but to be open to possible cross-disciplinary commonality as well. To my knowledge, there has not been any research conducted to compare the occurrence of peer interaction across different disciplinary practices.

As for within-discipline variability, on the other hand, this research distinguishes disciplinary learning motivations/objectives from students' own learning beliefs and actions in their disciplinary education. This will be possible when students are conceptualized as active learners who are able to take initiatives to participate in and negotiate the existing educational practice. In this conceptualization, students are not taken as novices who currently participate in the disciplinary community peripherally and socialize themselves into the discourse of disciplinary experts. This research thus sees disciplinary education as pluralized between disciplinary learning objectives and students' own learning motivations and actions. Students' participation in peer interaction will be examined from this perspective, as a realization of their learning motivations and actions within the constraints and affordances of disciplinary learning objectives.

## **2. Conceptual framework: Active learning and collaborative learning**

To inform EAP learners and practitioners with more detail of peer interaction in the target educational practice, this research adopts the view that peer interaction is a learning tool, and a

form of students' active involvement in managing their own learning development. Engaging in peer interaction, students are captured to be collaboratively pursuing this learning development management. In this section, the concepts of *active learning* and *collaborative learning* are reviewed.

## **2.1. Active learning**

Contemporary Western education is known for its initiatives for these decades towards more active engagement of students in their own learning (Niemi, 2002). This perceived style of education is called *active learning* or student-centred learning. While the definition of active learning has not received global consensus (Sivan, Leung, Woon, & Kember, 2000) and educators have often been found using the term “active learning” in an intuitive and subjective way (Bonwell & Eison, 1991; Prince, 2004), Bonwell and Eison (1991) define instructional activities promoting active learning as “involving students in doing things and thinking about what they are doing” (p.5). This active engagement is starkly contrasted with “being passive recipients of knowledge” (Sivan et al., 2000, p. 381). Drake (2012) raises as examples of active learning “in-class discussion, case study discussion, short written exercises, role-playing, games, hands-on activities, debate, academic service learning, experimental learning, and discovery learning” (p.40). Aguilar (2016) captures lecture and seminar as communicative events having contrasting characteristics in terms of learning involvement, positing “[i]f in lectures students are seen as receivers of knowledge, in seminars students at various levels are regarded as learners that have to actively be involved in their learning process” (p.337). Seminars can be captured as a communicative event intended for active learning.

From the perspective of international students from non-Western educational practice, however, participation in learning activities aiming for active learning could pose challenges to them. For example, Asian international students' behavioral patterns have been put in contrast with those of local students in Western educational practices (Mason, 2007; Chen, Bennett, & Maton, 2008). According to Chen et al. (2008), international students from Chinese cultural backgrounds have been identified by the past research to be more passive learners who would seldom question authority figures or written discourses in a critical way. This culturally rooted learning style has been considered to contradict what is expected in Western education, which

emphasizes the development of learners as independent, critical thinkers. Chen et al. (2008) succinctly characterizes the difference in learning behaviors in classroom contexts, as “Chinese learners are acculturated to *listen* to understand, while Western learners are encouraged to *question* to understand” (p.308). This behavioural difference is thought to be a reflection of the distinction between the two cultures in terms of their educational practices. My study pays attention to this cultural difference and aims to describe how active learning is practiced in the target postgraduate education, how local students are equipped with resources to participate in the active learning practice, and how international students with different educational backgrounds experience the active learning practice.

## **2.2. Collaborative learning**

*Collaborative learning* is captured as a form of active learning (Prince, 2004). It is viewed as among the most beneficial forms of active learning due to its perceived enhancement of students’ active involvement in their knowledge construction and development (Blasco-Arcas et al., 2013; Prince, 2004). As is the case with the concept of active learning, collaborative learning has been defined in various fashions with no conclusive consensus (Dillenbourg, 1999). Dillenbourg (1999) sets up its broadest definition as “a *situation* in which *two or more* people *learn* or attempt to learn something *together*” (p.1) as the foundation of discussions. With this conceptual ambiguity, however, the educational benefits of collaborative learning have been largely discussed in terms of its entailment that it involves interaction that will play a significant role for the development of learning (Dennen, 2000; Li & Lam, 2013; Barron 2003; Dillenbourg, 1999). This view is underpinned by social constructivist conceptualization of cognition as processes mediated by language and interaction (Vygotsky, 1978), and the benefits of collaborative learning have then been largely appreciated by educators with keen attentions to the socio-cognitive nature of learning processes (e.g. Gerlash, 1994). For example, Remedios et al., (2008) find collaborative learning beneficial in the sense of promoting “the sharing and public co-construction of group knowledge” (p.202). Students can benefit from the conditions of “both explaining to others and having material explained to them by their peers” (p.202), when self-explanation facilitates new knowledge being subsumed into their existing cognitive structures (Coffin et al., 2012; Weinberger & Fischer 2006). Also, Dillenbourg (1999)

emphasizes that interaction among students can generate a range of cognitive/verbal activities, such as disagreement and mutual regulation, which will in turn trigger extra cognitive mechanisms including “knowledge elicitation, internalisation, reduced cognitive load” (p.5).

In EAP research into students’ oral communication, the concept of collaboration has received modest attention as a valued part of the target education culture (e.g. Morita, 2000; Guo & Lin, 2016). Morita (2000) found through her interview with a lecturer that collaboration is what educators try to promote in the academic culture of the postgraduate TESL program in Canada. Guo and Lin’s study (2016) captures group discussions as collaborative meaning making activities and explores Taiwanese students’ socialization into group discussions as the TESOL academic discourse. While these investigations focus on NNSE students’ socialization processes into the target community of practice, they are not particularly intended to explore what might be the nature of collaboration learning in the target educational practice. The current investigation will adopt the view that collaborative learning is a realization of active learning (Prince, 2004) and that students’ competence of active and collaborative learning is strongly connected with their educational practice. With this perspective, this research aims to describe the nature, meaning, and purpose of peer interaction in the target postgraduate education across disciplines. It will explore how actively and collaboratively students may learn in peer interaction and how they may contribute to creating the educational practice together with educators who promote active and collaborative learning. NNSE international students’ experiences are also explored in terms of participation in this active and collaborative learning practice. The focus will be on how non-native-speaker-of-English (NNSE) international students experience and negotiate their participation in this new educational practice, which might be different from what they were familiar with in their previous learning environments. The next section will present ethnography as the methodology that makes this research into the active and collaborative learning practice feasible.

### **3. Ethnography and ethnography of communication**

As shown so far in this chapter, this research aims to explore and describe various aspects of peer interaction in the context of postgraduate disciplinary education. Peer interaction

opportunities are conceptualized as learning channels, and multi-faceted information is gathered to consider what types of peer interaction might exist, how peer interaction can be created and utilized, and how meaningful peer interaction as learning tools might be to lecturers, local postgraduate students, and NNSE international students who participate in their new educational environments. To make feasible this sort of “thick description” (Geertz, 1973) of peer interaction in postgraduate educational environments, this research will adopt ethnography as a methodological perspective. This section reviews the concept and application of ethnographic approach in the EAP research field, which support the current study for robust research perspectives and methods.

### **3.1. Definition of ethnography**

Ethnography-inspired research approach itself has been around in the EAP/ESP research fields in general for decades (e.g. Swales, 1998; Prior, 1998; Flowerdew & Miller, 1992). In EAP oral communication research, too, ethnographic approach has been widely used (e.g. Northcott, 2001; Jackson, 2003; Morita, 2000, 2004; Vickers, 2007; Ho, 2011). Although the definition of ethnography has been not without controversy (Mackey & Gass, 2005), the following description of the nature of ethnography by Hyland (2006) suffices as a starting point of discussion:

Ethnography is an interpretive and qualitative approach to research based on the study of behaviour in naturally occurring settings. While acknowledging that language is always an important part of such settings, ethnographic studies take a wider view to consider the physical and experiential contexts in which language is used. This perspective therefore gives greater emphasis to what people actually *do*, locating acts of communication – of speaking, writing or listening – in the behaviour of groups and employing methods which are interpretive, contextualized and respectful of participants’ views (Hyland, 2006, p.65).

As this description suggests, ethnography overall is potentially multi-faceted with several points of characterization, which include (1) research into natural settings, (2) attention to group



activities and behaviors, and (3) the understanding of “emic” (Agar, 1986), or insider, perspectives of the activities and behaviors. Ethnographers aim to produce a form of “thick description” (Geertz, 1973) by addressing these points.

### **3.2. Requirements for ethnographers**

To develop their understandings of the target practice, ethnographers are also required to establish a close connection with the target situations (Hammersley & Atkinson, 1983). At the same time, however, ethnographers also argue that this sort of description is made possible through “a constant urge to problematize, to turn what seems familiar and understandable upside down and inside out” (Czarniawska-Joerges, 1992, p.73), keeping in mind what could be dismissed as taken for granted by the insiders. Ethnographers are thus required to balance between two seemingly conflicting perspectives.

In relation to the requirement of ethnographers, it should be noted here that one of the strengths of the current study in taking an ethnographic approach is that my identity as a researcher will be well qualified as an ethnographer as suggested above. I am familiar with the target educational contexts as a member of the particular academic community (that is, previously as an MA course student and as a PhD student in the target context) though at the same time I have the status of being an outsider with a different socio-cultural background, that is, an non-native-speaker of English, Japanese by ethnicity, an English teacher who received education wholly in Japan and engaged in educational practices there. These profiles of mine are expected to allow me to be uniquely eligible for the requirement of the ethnographer as “intellectually poised between familiarity and strangeness; and....socially... poised between stranger and friend” (Hammersley & Atkinson, 1983, p.112). The current research is thus expected to identify what might be left unnoticed for the insiders but emerge or be marked as unusual for the outsiders. Also, as this research will address NNSE international students’ experiences of peer interaction in postgraduate educational practices, so the status of NNSE international students partially as insiders and outsiders in the target educational community is also expected to bring their “ethnographer” perspective to this research. Their unfamiliarity with the new educational environments relative to their previous educational experience is highly

likely to inform this research of the nature of the target educational practice in the way that local students and lecturers might not be aware of it.

### **3.3. Ethnography of communication and communicative competence**

Hyland's above-mentioned description of the nature of ethnography suggests that language and communication have always been considered to take a central role in social practices. Hymes's (1972) research perspective, which is termed *the ethnography of communication* (EOC), is an ethnographic perspective with a particular interest in language use and its cultural contexts. In the centre of this approach is the concept of *communicative competence* (Hymes, 1971; Saville-Troike, 1982; Canale & Swain, 1980; Bachman, 1990). Saville-Troike (1982) addresses the definition of communicative competence in relation to EOC as follows:

The subject matter of the ethnography of communication is best illustrated by one of its most general questions: what does a speaker need to know to communicate appropriately within a particular speech community, and how does he or she learn to do so? Such knowledge, together with whatever skills are needed to make use of it, is *communicative competence*. The requisite knowledge includes not only rules for communication (both linguistic and sociolinguistic) and shared rules for interaction, but also the cultural rules and knowledge that are the basis for the context and content of communicative events and interaction processes. (p.2)

Communicative competence originally grew out of Hymes's ideological conflicts with Chomsky's (1965) dichotomy between competence and performance (Celce-Murcia, Dornyei, & Thurrell, 1995). Criticizing Chomsky's belief in isolating grammar out of its contextual use to pursue his goal of accounting for human creativeness in language use, Hymes emphasizes that attention should be duly paid to "the situations in which what is grammatical is appropriate, and what rules relate the two" (Hymes, 1971, p.45). Similar views are shared by different theorists, which includes Canale and Swain (1980) with their communicative competence, especially, sociolinguistic competence, and Bachman (1990) with his communicative language ability.

The attention to the contextual norm of language use leads Hymes to draw on a range of disciplinary frames including linguistics and anthropology (Duff, 2002) to explore culturally shared patterns of communication in naturally occurring environments (Saville-Troike, 1982). Duff points out that the adoption of the ethnography of communication framework in research into educational settings was activated by the critical attention to social and educational issues in the 1970s and 1980s in the U.S. and widely spread into other countries. In the EAP research field, EOC has been mainly developing with the constructs of language socialization and/or academic discourses with a particular interest in identity and membership (e.g. Morita, 2000, 2004, 2009; Vickers, 2007; Ho, 2011; Guo & Lin, 2016). Morita (2000), for example, investigates TESL postgraduate students' experience of socialization into the oral presentation discourse, and found that the discourse socialization into academic oral presentation, or the development of communicative competence for academic presentations, is a complex process of negotiation potentially full of conflicts.

Although this research interest in students' discourse socialization processes has thus generated much information on L2 students' problematic experiences in the target educational situations, communicative competence so far has been mainly highlighted in terms of discipline-specific discourse skills in the EOC-inspired EAP research. The potential of communicative competence as the original core concept of EOC (Hymes 1971; Edelsky, 1976) will contribute further informative knowledge if a researcher adopts a view of the multi-faceted nature of educational practices (Ashwin, 2012; Solomon, 2007) and casts light on learner communities as well as disciplinary expert communities. This research adopts this view with a hypothesis that students could develop and employ communicative competence specific to their learner communities, which is essential to meet various needs they encounter in communicative situations and events, such as peer interaction. This learner-oriented communicative competence should technically be differentiated from academic expert communicative competence, since this research aims to explore aspects of peer interaction as a learning tool for students.

### 3.4. Intercultural competence

An important variable for this research regarding students' agentic use of the learner-oriented communicative competence in educational practices is the socio-cultural profiles of the students. For students who come from different socio-cultural backgrounds, their participation in the target educational practice could be different from that of the students who share the socio-cultural norms in the target environments. Especially for international students, the target situation might require them to acquire a set of behaviors, attitudes, and values different from what they are already equipped with. *Intercultural competence* (Hammer, 2012; Bennett & Bennett, 2004; Deardorff, 2004, 2008) is a construct that addresses this shift in communicative competence across different cultural contexts. Hammer (2013) defines intercultural competence as the "capability to shift cultural perspective and adapt behaviour to cultural commonality and difference in order to successfully accomplish cross-cultural goals". The development of intercultural competence is hypothesized to start with raised awareness and sensitivity to potential intercultural differences in educational practice between their original environments and new ones.

The previous literature identifies issues for international students due to differences in educational practice (Valdez, 2015; May, 2011). International university students' participatory behaviors in oral communication vary dependent on their previous experiences with educational activities (e.g. Ma, 2008; Morita, 2000; Andrade, 2006; Ramburuth & Tani, 2009; Ballard & Clanchy, 1991). While all these studies have accumulated information on how problematic cultural differences in new educational practices will be for international students, the students' employment of intercultural competence to negotiate their way of learning across socio-culturally different learning communities has not received enough attention. The implementation of intercultural competence in the educational settings is never one-sided but concerns local students and lecturers as well, but more knowledge needs to be generated as to the processes of international postgraduate students adapting to their new learning communities across culturally different educational practices.

#### **4. Chapter conclusion and research questions**

Informed by the literature reviewed in the previous sections, the current study aims to investigate peer interaction in postgraduate educational practices across disciplines. The research will adopt active and collaborative learning as conceptual frameworks and the ethnographic approach as methodology. As qualitative and interpretive research, it is intended to generate a rich description of the target educational practice. It has a specific interest in how social agents, including lectures, local students, non-native-speaker and native-speaker international students, contribute to the creation and utilization of peer interaction as an educational device within contextual affordances and constraints. Students' use of communicative competence as well as intercultural competence as a realization of their active learning efforts will also be given a particular focus due to the lack of due attention in the EAP research fields.

Three dimensions of the target educational practice will be explored with particular attention in the current study:

1. Identification of peer interaction types in relation to different communicative events and their occurrences across disciplines with an aim to describe cases of active and collaborative learning practices at postgraduate level.
2. Exploration of various factors that could influence the occurrence of educational peer interaction: In terms of contextual factors, the way culture, discipline, and study level might influence the occurrence of peer interaction opportunities. In terms of situational factors, how socio-physio-temporal conditions of an educational situation might impact on the occurrence of peer interaction opportunities. Regarding personal factors, what personal beliefs and resources could impact on the use of peer interaction as a learning tool by local and international students as well as lecturers.
3. Description of postgraduate students' language use in peer interaction as evidence of their implementation of communicative competence for active and collaborative learning.

To address the above-mentioned dimensions of postgraduate peer interaction opportunities, the current research will be guided by the following research questions:

1. What types of peer interaction opportunities occur in postgraduate educational environments and how differently might they occur across disciplines?
2. What factors can be involved in the creation and utilization of peer interaction in postgraduate educational practices across disciplines?
3. How do postgraduate students use their communicative competence in a peer discussion for their active and collaborative learning?

## **Chapter 3: Methodology**

### **1. Introduction**

In this chapter, the methodology design for the current ethnographic study is detailed. Given its exploratory nature, the development of the current methodology took circular processes rather than a linear process. Methods were provisionally conceptualized, contextual information was gathered in the field, data gathering methods were tested in the actual data collection setting, and finally the conceptual and methodological frameworks were established. This chapter addresses these processes in a chronological fashion.

The chapter is structured as follows; first, the components of the current methodology are justified (Section 2). Then, the general research setting is shown (Section 3) and the process of how conditions for the current research were set up in terms of methodology is described (Section 4). The specific research venues and participants are profiled (Section 5) and refined methods for data collection and analysis are specified (Section 6). Lastly, ethical considerations are described (Section 7).

### **2. Methodological components**

Interviews and observations have been used in an ethnographic approach to EAP research. For example, using these methods, Northcott (2011) investigated interactiveness of MBA lectures, Lee (2009) studied Korean international students' intercultural communication in postgraduate classrooms, and Jacobson (1987) explored peer interaction in physical undergraduate classrooms. Following this tradition, the current study will employ observations and interviews as main components for data collection.

## 2.1. Observations

Observation is pivotal among other optional methods for ethnography (Gobo, 2008). Direct entry into the target community in its natural settings allows researchers to have a deeper understanding of how the community members behave than only indirect inquiry into the targets does (e.g. through questionnaire surveys). It also helps identify gaps if any between what people believe and what they actually do (Gobo, 2008).

Two types of observation, participant and non-participant observations, have been distinguished in an ethnographic approach. In participant observation, researchers “play a dual role of observing while fully participating in activities with other group members” (Mackey & Gass, 2005, p.176). Obviously as a requirement for this type of observation, researchers have to become eligible members of the target community so that they can “blend in” to the focused activities. In contrast to participant observations, non-participant observation is “a relatively unobtrusive qualitative research strategy for gathering primary data about some aspect of the social world without interacting directly with its participants” (Williams, 2008). In the present study, non-participant observation was used for several reasons. Firstly, it is simply not feasible for me as a researcher who lacks disciplinary knowledge to participate in postgraduate-level peer interaction with other students in the multiple unfamiliar target disciplines, in this case, Engineering, Management, and Finance. Also, in the educational communities under the current investigation, any type of participation of researchers in students’ learning activities would be ethically hazardous because of its obtrusiveness.

It should also be noted, however, that, although non-participant type is taken as the observational format, I am equipped with some level of insider perspectives and experiences. I belong to one of the research venues (Applied Linguistics) as a PhD student and also have experienced educational practices there while I was enrolled in a Master’s programme. To this extent, the current observation can be said to have some elements of participant observations, though I did not engage in any particular activity under investigation. In other words, the current study is unique in the sense that, through the lens of the researcher’s emic perspective as an insider of one educational community, the different disciplinary communities are described and compared to seek a deeper understanding of their commonalities and differences.



A noticeable caveat of non-participant observation is the possibility that the presence of researchers might impact on behaviours of community members in their natural settings, causing some reactivity (Mackey & Gass, 2005, p.176). The Hawthorne effect is well known as an exemplar phenomenon. The Hawthorne effect is a form of reactivity whereby “[B]ehavior may be changed according to how those being observed think they are expected to behave” (Lockyer, 2008). Labov (1972) phrased the dilemma caused by this sort of interference as the “observer’s paradox”, in which;

The aim of linguistic research in the community must be to find out how people talk when they are not being systematically observed; yet we can only obtain these data by systematic observation (Labov, 1972, p.209).

In the current research design, however, this type of idiosyncrasy is less likely to cause a significant threat to the internal validity of findings. Having multiple sources of data enables observation data to be triangulated with other sets of data from different sources in the same venue, so that any anomaly can be detected through the course of collecting and analysing data.

## **2.2. Interviews**

Along with observations, interviews constitute a common component of ethnographic studies. As O’Reilly (2008) says,

In-depth conversations (or interviews) give the ethnographer and respondent time to delve more deeply, to express their feelings, to reflect on events and beliefs, and to even expose their ambivalences. In-depth interviews also create space for the participants to focus on intimate details, to remember historical events, and to discuss things that would not be discussed in normal circumstances. (O’Reilly, 2008, pp.125-126)

Even though peer interaction might be quite a commonplace phenomenon in educational contexts in NZ, participants might not be likely to have ever paid full attention to the phenomenon. In this condition, in-depth interviews are expected to be a powerful tool for data collection in the sense that they can trigger more thought of this particular interaction type than

they would usually give to it in their natural environments and thus elicit much deeper information.

Interviews are known for a range of interviewee-driven factors, such as “selective recall, self-delusion, perceptual distortions, memory loss from the respondent” (Hall & Rist, 1999, pp.297-298, in Mackey & Gass, 2005), and “halo effect” (Mackey & Gass, 2005), which occurs when participants try to please researchers with what they think is expected. In the current study, these caveats were addressed by collecting data from multiple sources and triangulating them in analyses to filter out any idiosyncrasy.

### **2.3. Data analysis; triangulation**

Ethnographical methodology typically consists of multiple data sources (Hammersley & Atkinson, 1983) including observations and interviews, and the available data are triangulated into a thick description of the target practices/behaviours. In this study, information is also gathered from different sources, which will produce multiple data sets that will in turn generate deeper knowledge and understandings of the target disciplinary cultures. Specifically, data sets from the two main methods, that is, observations and interviews, are triangulated with additional data sets from different sources.

## **3. General setting**

Victoria University of Wellington (VUW) is the setting for the current research. This tertiary institution is one of the eight universities in New Zealand and has around 21,000 students enrolled, including “over 3,000 international students from more than 100 countries” (Victoria University of Wellington, 2016). This educational setting with a large population and wide ethnic/national varieties in the student demography is optimal for the current research design, since this study aims to provide a spectrum of different perspectives of a range of stakeholders engaging in intercultural communication in the postgraduate education.

This study also aims to provide “thick” (Geertz, 1973) descriptions of postgraduate peer interaction, by using qualitative methods with elements of an ethnographic approach. My insider knowledge into the “community of practice” (Lave & Wenger, 1991) in VUW was thus expected to facilitate the research. This knowledge of existing communities and practices has been acquired as I have belonged to VUW for more than four years first as a language programme student, then as a Master’s student, and now as a PhD student.

#### **4. Scoping and piloting**

Five months in total were allocated to setting up conditions for the current research. This preparatory stage had two modules; (1) scoping and (2) piloting. In this section, the processes and findings at this condition set-up stage are detailed.

##### **4.1. Definitions of scoping and piloting in the current research**

‘Scoping’ is defined in this study as collecting preliminary information that could be useful for decision-making in choosing specific research venues in the current setting and also could help improve and fine-tune conceptual and methodological framework. This process was particularly essential for the current research design to ensure that, within the pragmatic constraints of the research timeframe and resources, generated knowledge should adequately and appropriately capture the nature of postgraduate educational practices that are likely to vary according to a range of contextual factors related to disciplines and lecturers and students there. On the other hand, ‘piloting’ is constructed to be a testing of methodological procedures to improve them to the optimal utility. Scoping and piloting are not exclusive to each other and can be packaged into one activity. An example is classroom observations where the procedure and format of field note taking are tested (= piloting) at the same time when information thus collected adds to understanding of educational practices (= scoping).

It should be noted that scoping and piloting also functioned as ways to familiarize and socialize the researcher into target communities of practices. In an ethnographic approach, the

researcher's socialization into the target community is justified in the sense that the approach aims to understand how members of community view their own behaviour and culture and that socialization facilitates this objective. Accumulated visits to target physical settings and regular meetings and chats with students and lecturers as members of the community helped gradually make a stronger deeper understanding of the target community and its practice. These cognitive and affective conditions thus help with research in terms of collecting and analysing rich meaningful data. The following two sections will detail the processes of scoping and piloting respectively.

## **4.2. Scoping**

Victoria University of Wellington holds a broad range of academic disciplines, institutionally 9 faculties and 27 schools. Decisions had to be made as to which disciplines would best fit the current research design in the current general setting. Over five months, the researcher incrementally gathered information enough to evaluate the practicality of the implementation of the proposed research. This does not necessarily mean that this phase of investigation was sequentially processed from one research venue to another, but rather concurrently and often opportunistically managed. In the following subsections, the guiding principles, processes, and decision makings will be detailed.

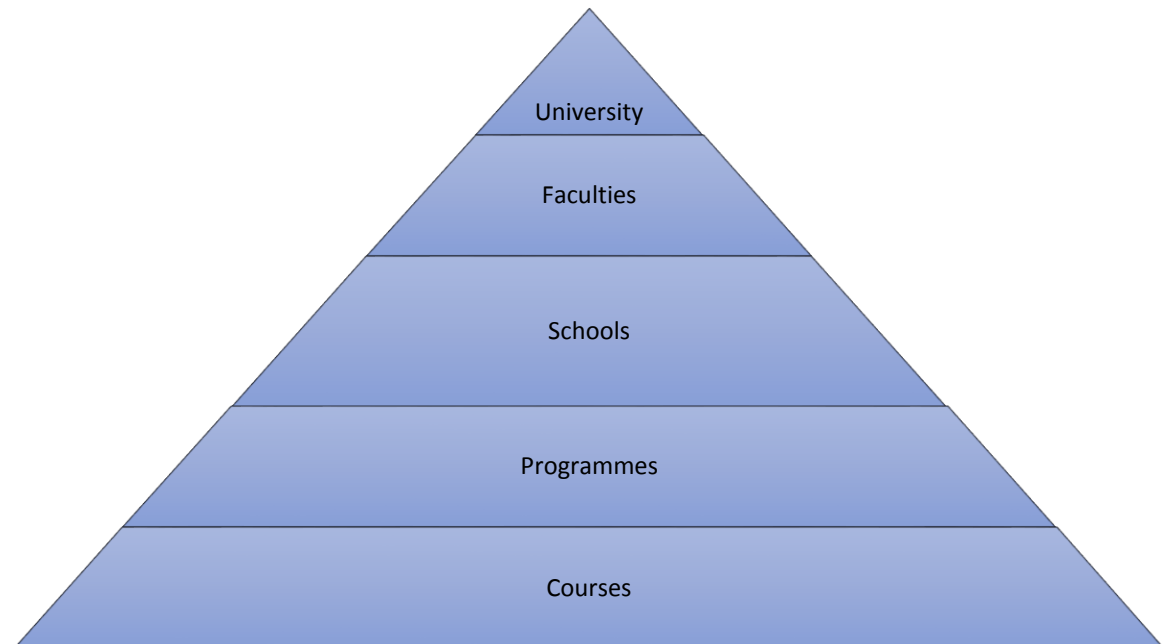
### **4.2.1. Principles for choices of disciplines**

Scoping was carried out in a principled way so that it would provide appropriate and sufficient information to make valid choices of disciplines. Below is shown the list of the principles for selecting the venues for the research:

1. The target discipline should have postgraduate 'programmes', such as Master's and Honours, and 'courses' (Figure 3.1). Postgraduate courses are defined as ones that are open to Honours and/or Master's students for academic credits they need to complete their degrees.

2. The target discipline should have postgraduate courses practising learning activities involving peer interaction in and/or outside classrooms.
3. The target discipline should have sufficient numbers of international students enrolled in its postgraduate courses.
4. The target disciplines should be selected from different ‘faculties’, which is the second layer of administration in the institutional structure of Victoria University (Figure 3.1).
5. A discipline is preferably sought after at the level of the ‘school’, which is the third largest administrative unit in the institutional structure of in Victoria University (Figure 3.1). A faculty is judged to be too broad as a disciplinary unit for this research.
6. As an exception to the previous principle, multiple schools in the same faculty can be collectively bundled as one discipline on the condition that the schools in question share a number of courses and teaching staff, and postgraduate students from different schools attend the same courses for their required academic credits.

*Figure 3.1: The institutional structure of educational units in Victoria University of Wellington*



#### **4.2.2. Processes of venue scoping**

Having established a list of principles for selecting the target disciplines for research, venue scoping was carried out. Information was gathered through (1) written documents such as webpage information and brochures about the disciplines, and (2) informal interviews with academic staff members and former and current postgraduate students. The informants were contacted through the researcher's existing social networks or, in the case of faculty members, through contact details available online in the university website. The objectives of scoping were fully explained to each informant. In the fashion of informal face-to-face interviewing, the researcher made enquiries around the typical class size, physical settings, demography, learning activities, assessment types, lecture style, and institutional structure that could be useful for decision-makings on possible target disciplines.

#### **4.2.3. Decision makings on research venues**

Three disciplines met the criteria set out in the principles mentioned in 4.2.1. and were promising in terms of finding participants, which are Applied Linguistics (School of Linguistics and Applied Language Studies) from the Faculty of Humanities and Social Sciences, Engineering (School of Engineering and Computer Science) from the Faculty of Engineering, and the Business School from Faculty of Commerce. The Business School was a collective name for multiple constituent schools in the Faculty of Commerce, and it was chosen because the constituent schools were found to share teaching staff and courses in many occasions.

#### **4.3. Piloting**

Prior to the implement of the main study, piloting was carried out during the period of November 2013 to February 2014. Mackey and Gass (2005) emphasizes the point of a pilot study as testing, revising, and finalizing the proposed materials and methodological procedures in the sense that researchers will be able “to uncover any problems, and to address them before the main study is carried out” (2005, p.43). The general objectives of the current piloting were two-fold.

The first was to inform the development of robust observational procedures using field notes. A range of aspects of the proposed observation was tested, modified, and established so that the reliability of findings and discussions in this study would be enhanced to the greatest extent. Secondly, the pilot observation also functioned as a means to accumulate preliminary knowledge of existing educational practices in candidate venues. This was particularly the case with the Engineering and Business Schools, the practices of which were unknown to the current researcher as an outsider. To elicit emic perspectives of the community members, experiences in the target fields and familiarity with them had to be broadened. Increased knowledge of the target practices was highly likely to help sharpen sensitivity to details in observations and interviews. The following sections will discuss the details of the piloting, which include field notes, settings and participants, procedures, identified issues and solutions, and generated relevant knowledge.

#### **4.3.1. Field notes**

Note-taking is a dominant way of recording data in qualitative research (Yin, 2011). While there might be no consensus about formats in which to take field notes, literature provides some guidance on reliable procedures of note taking. When researchers take field notes, they necessarily have to be selective in what they record, as they cannot record everything happening in the field. To be effective and efficient, this selection should be relevant to their initial research questions (Yin, 2011). Another consideration is the degree of structure (Mackey & Gass, 2005, p. 175). If a researcher has specific research foci and pre-set analytical framework, they can take highly structured notes, such as check lists and rating grids. On the other end of the scale, they may use open-ended field notes that can accommodate any impressionistic findings they make while observing.

To ensure collecting reliable data that should be relevant to the current research questions while addressing possible emergent findings in the field, a decision was made to introduce systematicity and to design field notes in a semi-structured way. The focus was on the identification of activities involving peer interaction opportunities in classrooms and any interesting phenomenon in the activities. The items selected are (1) time (= what time an activity begins and ends), (2) relational aspects (= how a group is formed for a peer interaction activity),

(3) task description (= what activity the teacher gives), and notes (= what is found about the students' participation and performance). The piloting involved testing and refining the efficiency and robustness of this note-taking method.

#### 4.3.2. Settings and participants of piloting

Five piloting opportunities were obtained to observe different classrooms from two disciplines. Four of them were from the School of Linguistics and Applied Language study (Applied Linguistics) of Victoria University of Wellington, and the other from Business School, specifically, the School of Accounting and Commercial Law (Accounting). There was no opportunity available, unfortunately, to observe a class from Engineering, because the designated period of piloting happened to fall in the summer break, when very few postgraduate courses were open across disciplines and the number of potential participants was significantly limited. Given this circumstantial constraint, venue choices for the piloting were opportunistic.

The five pilot observations totaled 12.3 hours. The details of the venues and participants are shown in the table below (Table 3.1). Pseudonyms are used to ensure that individual participants cannot be identified. In the case of Graduate Certificate in TESOL and Masters of Professional Accounting (MPA), ethnicities of participant students were guessed through observations, without any confirmation from the participants themselves.

*Table 3.1: Contextual information of pilot observations*

Course Name	Discipline	Programme	Student Profile		Time
			Country of origin	Number	
PO01	Applied Linguistics	Master of Arts in Applied Linguistics/TESOL	Japan	1	100 minutes
			Vietnam	2	
			Indonesia	1	



			Taiwan	2	
			Iran	1	
			Hong Kong	1	
PO02	Applied Linguistics	Master of Arts Applied Linguistics/TESOL	New Zealand	2	100 minutes
			Iran	1	
			Taiwan	2	
			Hong Kong	1	
			Vietnamese	2	
PO03	Applied Linguistics	Certificate of Proficiency; EPP (English Proficiency Programme)	China	13	Around 380 minutes in total for two classes (220 minutes and 160 minutes)
			Iran	1	
			Saudi Arabia	1	
PO04	Applied Linguistics	Graduate Certificate in TESOL	New Zealand	12	100 minutes
PO05	Accounting	Master of Professional Accounting (MPA)	China	10	60 minutes
			New Zealand	2	
			Unknown	2	
Total				57	740 minutes

As the table above shows, observations included one English learning class, which was a part of the university's pre-enrolment English programme, called the English Proficiency Programme (EPP). Obviously the pre-enrolment English course does not fit the definition of post-graduate level courses set up for the current research. The justification for this decision is that, from the researcher's own experience as an EPP student, EPP classrooms are similar, in terms of small physical settings, to some post-graduate classrooms, such as MA classrooms in Applied Linguistics. Priority was put on the training of the researcher's observation skills before the main study commenced. The findings from EPP were not reflected in any decision making on the choice of research venues and the establishment of conceptual/methodological frameworks, but solely informed the testing of observational methods.

#### **4.3.3. Procedures for pilot observations and data analysis**

First, I was either introduced to their students by the lecturer or introduced myself to them when the classes just started. A brief explanation was made about the purpose of attending the class as an interest in classroom interaction and activities. I took a seat a little away from the students and lecturer to make sure that all the participants were in sight at once, taking field notes on pre-structured forms. In the case of an Accounting class, the particular lecture was set up in a medium-sized lecture hall that could hold 60 people, and I took a seat at the back of the hall where I could see all the participants. Every caution was taken to become least possible obtrusive as a non-participatory observer.

Procedures for the pilot observations were reviewed in the form of a report. Methodological issues were raised with possible solutions proposed. Information collected in the field notes were compared across classes, programmes, and disciplines to identify any emergent category and theme.

#### **4.3.4. Methodological issue: Field notes**

The first goal of the current pilot observations was to test and refine the data collection method in the classroom observation. Two issues were identified as to field note takings in the pilot observation processes. One is the structure of field notes, and the other is about work load and reliability.

Firstly, the semi-structured field notes contrived prior to the piloting had a format in which to capture occurrences of the type of peer interaction that is intended by the teacher to occur in a task she or he gives. This format design had grids to fill in so that entry and reference of required information could be facilitated. Through the field work, a fundamental issue was identified in this format because it could only be useful for the ‘task’ type of peer interaction, not for another type which was not pre-conceptualized prior to the piloting. Obviously a refinement or modification of the current design of field notes involves decision-makings as to a conceptual, and accordingly methodological, framework. Since in the current study peer interaction was conceptualized to be a focal point through which to describe postgraduate level educational practices, sensitivity was needed to address any type of peer interaction potentially occurring in the practice. The piloted structure of field notes needed to be modified accordingly.

Another issue with the piloted format of field notes was the work load I noticed during the field note taking. I had to be careful about my hand-writings so that I could read them easily later, and also attentive to the pre-set grids in the piloted field note format which should be used for particular sorts of information (such as time, activity type, interpersonal features, etc.). This design was contrived for the purpose of efficiency and facilitation, but it did not necessarily work in that expected way especially under the pressure of having to record the swiftly shifting, dynamic nature of classroom interaction. In essence, the piloted system of field note taking was found to be too systematic against time constraints, demanding more cognitive and physical load on the researcher than it should. Another way was needed to free up more cognitive and physical resources while observing, while allowing for speedy and reliable entries, so that the researcher could create field notes efficiently.

To overcome these two issues, Skype texting was chosen as a field note format. Skype is an Internet-based online communication tool that operates on personal computers or mobile

devices. One of the benefits, among others, of the use of Skype as a field note format is that it gives an automatic time stamp as an in-built function. To record the occurrence of a group discussion task, for example, the researcher does not have to pay extra attention to the starting time or duration of any particular activity or phenomenon of interest. Just to index the start and end of the task by putting 'group discussion starts' and 'end of task' will be enough for the later calculation of the task duration. The system automatically logs date and time information to the level of second on each entry made while taking notes. Also, this auto time logging is instrumental to record how the lecturer and students interact with one another during the observations. For example, every time a new speaker takes turns, the researcher writes the speaker's brief identification, such as 'lecturer', 'student A', and 'student B' or using their names if they are available. This information on interactants, together with information as to the identified occurrence of peer interaction, facilitates later analysis as to how long a particular peer interaction occurrence actually lasted.

Another benefit is that observation data thus collected on Skype can be easily copied and pasted electronically to turn into any chosen file format, such as Microsoft Word or PDF. This flexibility facilitates storage and later analysis as well. Lastly, typing on the computer keyboard provides more efficiency for the field work and for later analysis than writing on the paper, since I feel more confident and efficient in writing on the keyboard rather than on the paper. Hand-writing also often causes issues around recognisability, whereas the introduction of keyboard-writing is expected to entail fewer such issues. This format of note taking would allow the researcher more freedom to make notes on the field in a creative and contingent way.

#### **4.3.5. Other issues found in the pilot observations**

Besides what are related to conceptual and methodological issues, there were a number of issues found through pilot observations around aspects of data collection. Firstly, there was an ethical issue around taking consents. For the recruitment procedures in general, I took opportunities to see the lecturers at their offices or classrooms to explain the objectives and procedures of the pilot observation, and elicited their permissions orally without giving any consent form. I did not take any consent from student participants for these pilot observations

either because the focus was on trailing research instruments. This issue was addressed in the main study so that all the participants in the observations and interviews were informed of the details of the current study through information sheets and gave their consents.

Secondly, although I took every caution to be least intrusive into their usual practices, in most of the small classroom settings, many participant students could naturally see me observing and taking notes. This physical setting obviously involved the possibility of the observer effect or “Hawthorne effect”, which was mentioned in Section 2.1. After the observations were done, I talked with the lecturers firstly to show gratitude for their understanding of and support for my piloting and at the same time to see if there might have been any unusual behaviour on the students’ sides as well as any possible implementation of untypical classroom learning activities. This little follow-up talk was done on the assumption that the lecturers could tell atypical from typical classroom behaviours. It should be noted, however, that this cautious procedure was not thoroughly taken in every piloting observation opportunity. In the main study, the post-observation procedure were thorough and complete.

Thirdly, as the research design dictates, the researcher observed just one out of multiple classes (typically 10) from each postgraduate course. This ratio obviously raises the question of representativeness. One particular observation opportunity alone cannot ensure that what was witnessed was representative of typical classroom practices of the particular course. In the main study, however, this limitation was expected to be lessened because of its triangulation with interviews with the lecturer in charge of the class observed. The researcher would ask for general information about classroom practices over the entire course, as well as asking questions exclusive to the particular one class he observed.

#### **4.3.6. Findings through pilot observations and refinement of research design**

Other than validating the proposed methodology, knowledge was naturally generated through the pilot observations about occurrence of peer activities in postgraduate educational practices. This body of information helped the researcher set up better conditions for ethnographic observations and interviews aimed to elicit the insiders’ perspectives of the target

educational practices across disciplines. Also, it informed the refinement of conceptual framework for the main study. The following sub-sections will detail the findings from the pilot observations and the process of the research design refinement.

#### 4.3.6.1. Differences in peer activities between Applied Linguistics and Accounting

Through the observations, classroom peer activities were generally found in Applied Linguistics to occur three times on average in one session, whereas in Accounting no peer activity was identified in the observed class. With 300 minutes in three Applied Linguistics postgraduate courses versus 60 minutes in an Accounting postgraduate course, it could be that more time in observing Accounting could have resulted in more instances of peer interaction activities. In spite of this limitation, however, the two disciplines left me with the strong impression of sharp contrast between their educational practices. Below is the table that shows the findings as to differences in contexts between two observed disciplines (Table 3.2)

*Table 3.2: Occurrence of peer interaction opportunities in the two pilot observations*

Discipline	<b>Applied Linguistics</b>	<b>ACCOUNTING</b>
Classroom setting	Small-sized classroom	Medium-sized lecture theatre
Maximum capacity of the classroom	Around 25	Around 60
Student participants	Average 10	14
Frequency of peer activity	9 occasions in 300 minutes (1 in 33.33 minutes on average)	0 occasion in 60 minutes

This finding might arguably result largely from two possibly intertwined factors; physical settings and teaching strategies. All the Applied Linguistics class venues were set up in small-sized classroom, whereas, in the Accounting class, there were 14 students unevenly distributed in small clusters in a medium-sized lecturer theatre that could hold around 60 persons. In this physical setting, the Accounting lecturer seemed to try strategically to become the focal point drawing students' attention in every occurrence of classroom interaction rather than making best of students' potential voluntariness. In contrast, the small-sized classrooms of Applied Linguistics occasioned more active participation of students in the form of question raisings, idea sharing, and comment makings than the Accounting class. Lecturers in Applied Linguistics generally did not only try to elicit students' input in "Initiation-Response-Follow-up (IRF)" (Sinclair & Coulthard, 1975) structures but also set up the conditions in the forms of whole-class discussion and task in which students themselves would talk among themselves with little intervention from the lecturer, that is, collaborative learning activities.

#### 4.3.6.2. Emergence of a 'unexpected' type of peer interaction and the 'initiative' variable

This series of pilot observations were initially targeted at the identification of any possible occurrence of peer learning activities or collaborative learning activities, which were assumed to be strategically conceptualized, set up, and implemented solely by lecturers. This means that the type of peer interaction that had been assumed when the current study was designed was supposed to occur in a "student-centred learning" (SCL) mode, where an emphasis is put on activities through which students (co-)develop knowledge/skills themselves (Kember, 1997). Obviously any implementation of this educational approach into a classroom is based upon the lecturer's belief system around how learning and teaching can and should be coordinated in the context of classroom education. In this sense, the researcher had assumed it would be valid and sufficient to concentrate on the teacher's side to know the creation of peer interaction opportunities in educational contexts.

Contrary to this assumption, what was found in the pilot observation was postgraduate students' active peer interaction initiatives where the learners themselves drew on other students' knowledge and learning strategies as resources for their own or other students' learning. These

interactions were found to take place not only in the student-centred learning mode, or task mode, but in also the lecturer-centred mode. In the middle of a dialogue between the lecturer and a student, other students eagerly joined in with some communicative moves, such as clarification questions and follow-up comments. When these moves were oriented towards the interlocutor student, not towards the lecturer, a new dialogue was triggered between students themselves, thereby reorienting the nature of interaction from hierarchical into peer-to-peer interaction. This occurrence of peer interaction in the lecturer-centred mode is termed “cross discussion” by education researchers (Lemke, 1982, 1990). It is worth noting that, though cross discussion is found to rarely occur in some educational settings such as primary or secondary schools (Lemke, 1982, in Cazden, 1988), it is under-researched in the context of higher education, and in the English for Academic Purposes (EAP) field, it has never been focused on, to the best of my knowledge.

This finding entails that who takes initiatives to condition peer interaction opportunities can be a variable with binary values; (1) the one which is intended and conditioned by the lecturer to happen, and (2) the one which students initiate for themselves in a whole-class discussion or lecturer-centred mode. From here on, the former will be called the ‘task’ type and the latter the ‘voluntary’ type respectively. The voluntary type refers to what Lemke calls “cross-discussion”, but the term ‘voluntary’ is adopted here to intend a semantic contrast which the terms ‘task’ and ‘voluntary’ imply. These two distinctive types of peer interaction will be reflected in the refinement of the conceptual and analytical framework for the main study.

#### 4.3.6.3. Task relevancy and speech right as variables of peer interaction

In relation to the above-mentioned two general types of peer interaction, the pilot observations also identified variables that distinguished and characterized the nature of a particular occurrence of peer interaction. These variables would help critique and refine the construct and definition of classroom peer interaction as it is termed in the current research. These variables are (a) task relevancy, and (b) right to speak.



*(a) Task relevancy*

When students were given some task in which they were supposed to talk or do something in pairs or groups, three different types of peer interaction were observed regarding their relevancy to the given task. These three types were identified in terms of how relevant and related the topics the students talked about were to the one the teacher had intended them to engage in. When peer interaction is on the intended track as expected as a task, this will be called the ‘on-task’ peer interaction. However, students were sometimes found to be side-tracked, though typically very briefly, away from the right path they were supposed to follow. This type will be called the ‘off-task’ peer interaction. Also they were sometimes observed to be paying attention to a particular aspect of what they were intended to do, for example, to be discussing among themselves problematic parts of the given task, or to be confirming every member is on the same page about what they are engaging in. The interaction of this sort, which is aimed to manage the nature and features of the given task, will be called the ‘around-task’ peer interaction.

*(b) Right to speak*

In typical academic classrooms, Cazden (1988) posits, “the most important asymmetry in the rights and obligations of teacher and students is over control of the right to speak” (p.54). While the teacher is speaking, students are clearly not expected to start talking with each other but to be listening to what the lecturer has to say in the first place. When the classroom learning is configured as such, listening to the teacher talking is considered to be a default learning mode.

If some needs arise, however, students might be expected to initiate interaction with the teacher. In the pilot observations, this sort of ‘hierarchical’ interaction was frequently noted. Interestingly, students were also observed to draw on themselves as resources to meet their contingent needs, in the form of peer talk. Unlike young age children at primary schools, it should be noted, students fully knew how they should behave in classroom learning settings and how the rights to speak should be distributed while in class, so that they were found to choose to engage in this contingent peer interaction in a way that would meet a certain set of tacit principles: it should be brief, low in volume, infrequent, and desirably unnoticed by the teacher. The bottom line is that students were seemingly aware of how they could breach the tacit codes

of classroom behavior around speech rights, and the teachers seemed to allow them to do so as long as they complied with this legitimate way of breaching the codes.

There might be a range of motivations and justifications behind this type of peer interaction. Students might not want to disturb other students' precious classroom time with their seemingly trivial questions, or they might want to keep face and try to have least support from neighboring peers without letting the lecturer and other students know what they have difficulty in. For working purposes, this type of peer interaction, which occurs when it should not be occurring, will be called the 'covert' type in this study. The covert type of peer interaction was identified in many occasions across different venues in the current pilot observations.

Related to the right to speech in classroom settings, another type of peer interaction was identified in a few occasions where students were given a task in which they were supposed to engage in solo work, such as reading and writing. Compared to the 'covert' type of peer interaction, there seems to be a different set code of behaviour under this condition. The teachers did not specify how to elicit help from others when needed, but students were observed to be freely and openly drawing on other students as resources as well as on the teachers when they needed some helping hand while engaging in solo work. They seemed to have a consensus that they were tacitly endorsed to speak with other peers for problem solutions though the task given was supposed to be done individually. This type will be called the 'private' type of peer interaction.

#### 4.3.6.4. Summary of identified peer interaction types

The table below (Table 3.3) shows the summarized list of variables and values mentioned in the previous section. The formulation of these nominal scales helped develop a conceptual/methodological framework that will underpin data collection and analysis in the main study.

*Table 3.3: Identified variables and values for peer interaction*

<b>Variable</b>	<b>Value</b>	<b>Description</b>
Initiative	Task-type	This type of peer interaction occurs when the teacher sets conditions intended for students to interact with one another.
	Voluntary-type	This type of peer interaction occurs when a student takes initiatives to start talking to another student without any instruction to do so.
Task relevancy	On-task	This type of peer interaction is occurring if the topic students talk about among themselves addresses what the teacher intended them to talk about.
	Off-task	This type of peer interaction is occurring if the topic students talk about among themselves doesn't address what they were intended to talk about.
	Around-task	This type of peer interaction is occurring if the students strategically try to solve existent or potential issues

		around the nature and features of the given task.
Right to speak	Intended	This type of peer interaction occurs when the interaction is supposed or expected to be occurring.
	Private	This type of peer interaction occurs when students are, typically tacitly, allowed to interact with one another for some purposes while they are supposed to engage in individual work.
	Covert	This type of peer interaction occurs when students contingently do interaction among themselves, typically very briefly and quietly, knowing it shouldn't be occurring.

#### 4.3.6.5. Refinement of research design; conceptual and methodological framework

In the pilot observations, the way of recording research objects was found to reflect my then-untested assumption regarding the occurrence of classroom interaction, with my sole focus on educational activities where the lecturer intended and expected students' peer interaction to happen. This realization came when my attention was drawn to the emergence of

‘unexpected’ types of peer interaction and accordingly several variables, which did not have their place in my preconceived observational format.

Through this reflective self-critique, a decision was made that a holistic conceptual framework should be established to address newly identified phenomena and variables and consequently modify the details of the methodological procedures for observation and interviewing. Justifications of this decision making include:

1. Since educational peer interaction is an under-studied sub-field in EAP research area, its typology with attention to a range of aspects will contribute greatly to knowledge construction in this field.
2. What was found in the pilot observation is the relation between classroom interactional patterns (e.g. hierarchical VS peer) and teaching/learning modes (e.g. the whole class lecture mode VS task mode). In EAP research, this relation has not been discussed so far to the best of my knowledge, though there has been a relevant suggestion that pedagogical genres are interconnected to make systems (Molle & Prior, 2008). A holistic framework that addresses this gap would be beneficial for the advance of EAP classroom interaction research.
3. Establishing a conceptual and analytical framework and disclosing the process of its construction will add to reliability of qualitative research.

Firstly, the general guiding hypotheses were constructed to address the lecturer’s pedagogical intentions as well as students’ agencies in the creation of peer interaction opportunities and to override the previous exclusive research focus on the former in educational practices:

How peer interaction opportunities are created and utilized in academic contexts depends on how the lecturer and students conceptualize teaching/learning in a given context and how they make strategic choices in each teaching/learning situation.

In this inquiry frame, educational peer interaction is re-captured as an opportunity for students with agency to enrich their learning, with their learning conditions set up and scaffolded by the lecturer. This frame also generates modified research questions while underpinning methodology to be taken to address the questions.

Secondly, a conceptual framework for interactional patterns that is sensitive to different classroom teaching/learning modes was developed on the basis of variables found in the pilot observations. This framework is a model that describes what types of interaction can occur in relation to different learning modes (Table 3.4).

*Table 3.4: Conceptual framework for classroom interaction*

Learning Mode			Participant Configuration	Intended Interaction Type
Lecture Mode			Teacher – a whole class	No interaction intended
Interactive Lecture Mode	Teacher-led interaction	student’s teacher-appointed participation	Teacher – a student  Other students as an audience	Hierarchical
		student’s self-appointed participation	Teacher – a student  Other students as an audience	Hierarchical
	student-volunteered interaction	Teacher – a student  Other students as an audience	Hierarchical	
		A student – another student  Lecturer and other students as an audience	Peer  (Voluntary type)	
	Task Mode			Presentation/seminar (a student – a whole class)
Individual work				No interaction intended or peer interaction authorized/recommended
Collaborative work (pair)				Peer (Task type)
Collaborative work (group)				Peer (Task type)

In this framework, two types of peer interaction opportunities were set up as observational targets, which are (1) voluntary type, or “cross discussion” (Lemke, 1983), and (2) task type. With foci on these two types, both students’ and lecturers’ contributions to the target educational practices could technically be evaluated, since voluntary type is based on students’ initiatives to manage their own learning while task type is set up by lecturers. Besides these two main types, other peripheral types (covert and endorsed) were chosen as sub-focal points. In the main study, possibilities of other types of peer interaction were also explored on the basis of this framework.

This observational framework with pre-typified targets was also expected to help free up some cognitive and physical loads while taking field notes. For example, mere use of shortened forms or even initials of the pre-set categories would raise efficiency amid the efforts to capture shifting elements of the dynamic classroom interaction within time constraints.

#### **4.4. Conclusion of scoping and piloting**

This section described the process of setting up the conditions for the main study. Two modules of this condition set-up, namely, scoping and piloting, helped identify conceptual and methodological issues and develop and establish more robust methodology regarding research venues and procedures of data collection for the main study. Specifically, (1) based on the identified peer interaction types, a holistic conceptual/methodological framework was developed to address how different types of interaction can occur in relation to a range of classroom learning modes. This framework has incorporated students’ agency to capture the postgraduate learning environment as dynamic processes negotiated by the lecturers’ and students’ belief systems and situational strategies around teaching and learning. Clearer research focus is now given to the main study because of this conceptual/methodological lens. (2) Through scoping, enough contextual information has been now obtained to decide on which disciplinary areas should be targeted as specific research venues. The information covered a range of aspects including general demography of postgraduate students, typical educational practices, and institutional structure. (3) Semi-structured field notes as a data collecting tool were tested in the pilot observations. Issues were identified in relation to observational foci to inform the development of a re-conceptualized form of field notes for the main study. A new system of

taking field notes on Skype was established to address the issues. (4) Ethical issues around consents were found, and then considerations were made of how to cope with those issues in the main study. All these pieces of information and efforts made to address issues collectively contributed to optimizing the conditions for the main research projects. In the following sections, methodology established for the main study will be detailed.

## **5. Selection of disciplines**

Based on the information gathered through the research condition set-up, three disciplines, the School of Linguistics and Applied Language Studies (Applied Linguistics), the School of Engineering and Computer Science, and Victoria Business School, from Victoria University of Wellington, were confirmed as research venues. Here these three venues are profiled.

### **5.1. Applied Linguistics (the School of Linguistics and Applied Language Studies)**

Administratively, the School of Linguistics and Applied Language Studies (LALS) is one of the 10 schools and associated units belonging to the Faculty of Humanities and Social Sciences in Victoria University of Wellington. Postgraduate courses are given at two different levels, 400-level courses for Honours degrees and 500-level courses for Master's degrees. The 400-level courses are held in the first and second trimesters, the 500-level courses all the year across the three trimesters including the summer. The enrolment into the Master's programmes require prospective students to have a minimum two years of language-related professional experience, with an undergraduate qualification or academic points relevant to language. International students also need to meet English proficiency requirements, which is the overall band score of 6.5 without any sub-score below 6 in International English Language Testing System (IELTS), 90 in the Test of English as a Foreign Language Internet-based Test (TOEFL iBT), or required scores in the Victoria University English Proficiency Programme test.



At Master's level, in the academic year when the current research was done, a significant portion of the Applied Linguistics postgraduate students did their studies by distance, and on campus each course usually had 1 to 10 students enrolled. International students, mainly from South and North Asian countries, constituted a large percentage of the campus student population. Classes were held weekly and usually set up in small classrooms which were equipped with a desktop computer and a large screen connected to it. Typically one lecturer took both the coordinator and teacher roles.

## **5.2. Engineering (the School of Engineering and Computer Science)**

The School of Engineering and Computer Science belongs to the Faculty of Engineering, which is made up of one school, unlike other faculties in the university which are made up of multiple schools. This school requires undergraduate students to choose four years of full-time study for a Bachelor of Engineering (Hon) or to have three years for a Bachelor of Science. This means that in the case of a Bachelor of Engineering, its fourth year is equivalent to an Honours degree, which is integrated into this undergraduate programme. The fourth-year (400) level of Engineering courses are also requisite for some postgraduate programmes such as Master's and Diploma. Postgraduate courses in this school thus have quite an interesting mixture of student types, including fourth-year undergraduate students for a Bachelor of Engineering (Hon), postgraduate students for a Bachelor of Science (Hon), postgraduate students for Diploma and Certificate, and Master's students in a range of majors.

Requirement for enrolment into postgraduate courses in this school is based on having a relevant undergraduate qualification as in Engineering, Computer Science, and Electronic and Computer Systems. International students are required to have overall scores above 6.5 without any sub-score below 6 in IELTS, 90 in TOEFL IBT, or required scores in the Victoria University English Proficiency Programme test. Postgraduate courses are offered across two trimesters with no summer courses. The class size varies from around 5 to 20 in the relatively small classroom setting with the computer and monitor equipment. Classes take place typically 3 days a week.

### **5.3. Business School (the School of Management and the School of Economics and Finance)**

Victoria Business School is the branded name for the Faculty of Commerce, which consists of six schools. The School of Management and the School of Economics and Finance were chosen as a combined discipline, which is called ‘Business School’ for convenience in this study. These two schools often overlap with each other in terms of academic staff and courses at postgraduate level studies.

Postgraduate courses are provided both at the 400-level and 500-level, the former of which is basically aimed at Diploma, Honours, and Master’s students while the latter is generally designed for Master’s students. The Business School also offers ‘Professional Programmes’ such as a Master of Business Administration (MBA), Master of Professional Economists (MPE), and Master of Applied Finance (MAF). Enrolment into these programmes often requires or expects prospective students to have a related university qualification and a certain level of relevant work experience. The courses of MBA, MPE, and MAF are provided at the 500 level. International students are required to meet the standard criteria for enrolment, which is to have the overall band of 6.5 without any sub-score below 6 in IELTS, 90 in TOEFL IBT, or required scores in the Victoria University English Proficiency Programme test, as is also the case with most other disciplines in Victoria University.

The Business School offers weekly courses as well as intensive multiple-day courses to accommodate professional needs throughout the year. Classes for those programmes are typically held at small theatre-type lecture halls or large seminar rooms which can hold around 50 people. Computer rooms are sometimes used to provide each student with an individual workstation with a desktop computer.

## **6. Participants: Recruitment and profiles**

This section describes the processes of recruiting participants for observations, a recording of interaction, and interviews, and then it provides the participants’ profiles in each of the data collection modules.

## 6.1. Observations

The recruitment of participants in the classroom observation module took three steps in the process. The first was to elicit general permission for the current research from one who oversees a whole programme under which the target postgraduate courses are institutionalized. The second step was to recruit course coordinator or lecturer participants in charge of postgraduate courses. The third step was to collect consent from students who actually attended the particular classes observed. The information and consent sheets are appended (Appendix 1). This three-step procedure was taken for the purpose of making the recruitment process efficient and systematic.

Five classes were observed from each discipline, totaling fifteen observation opportunities from three disciplines. All the fifteen classes were taught by different lecturers for different courses. I was also able to observe one tutorial which was adjunct to one Engineering course I had an opportunity to observe. The details of the nature of each course are undisclosed so that participants can secure their anonymities. The total numbers of student participants in observations are 36 from Applied Linguistics, 41 from Engineering, and 123 from Business School. On average, Business School classrooms held a much larger number of students at the times of observations, as is shown in the table below (Table 3.5).

*Table 3.5: Observation participants*

Discipline	Course Code / Lecturer Name	Number of Lecturers	Number of Students
Applied Linguistics	AX01 / Ian	1	9
	AX02 / Kate	1	6
	AX03 / Andrew	1	9
	AX04 / Hannah	1	5
	AX05 / Brenda	1	7
	Sub-total	5	36
	EX01 / Ben	1	6

Engineering	EX02 / Akhil	1	6
	EX02T / Mark	1 (tutor)	5
	EX03 / Tim	1	10
	EX04 / Evan	1	10
	EX05 / Dylan	1	4
	Sub-total	6	41
Business School	BX01 / Sung	2 (lecturer and tutor)	30
	BX02 / Luke	1	15
	BX03 / Douglas	1	25
	BX04 / Oliver	1	31
	BX05 / Jackson	1	22
	Sub-total	6	123
Total		17	200

A number of considerations should be noted here in this table. Firstly, students' attendance was overlapping across courses. The same students attended multiple courses observed. Secondly, the consent sheet was designed to work for one person across multiple courses. This means that once they gave their consent sheets for one observation, they did not have to give another for the next observation. As a result, there is a possibility that in some courses the above-mentioned student numbers might not necessarily represent the actual numbers of those present there. This discrepancy happened because the numbers of overlapping students across courses were unknown in some cases. This was the case with BX01, BX03, and BX04 in Business school.

## 6.2. Recording of the classroom interaction

To gather data of students' actual linguistic and functional performances in peer interaction, recruitment was carried out for a recording of their classroom conversations. For this

process, pragmatic feasibility was considered first and foremost. This is, firstly, because of the nature of classroom interaction in general, which could be dynamic, parallel, and multifarious, as was known from scoping and piloting. Findings from scoping and piloting informed the current research that peer interaction for educational purposes has two distinctive types, namely, task type and voluntary type (Section 4.3.6.4.), which could technically occur in any classroom of any discipline. Task type peer interaction is highly likely to occur at multiple places in the classroom as pairs and groups concurrently engage in some activity. Voluntary type is unpredictable in terms of when students strategically take initiatives to start peer interaction in the interactive lecture mode. To address these characteristic parallelism and dynamism, multiple recording devices were used, since one device, such as a video camera, cannot ensure clear, recognizable quality of recording when multiple interactional sessions occur concurrently in different places.

Secondly, findings from scoping and piloting and also from early observations revealed that the nature of interaction in postgraduate classrooms has quite a range of variability, depending on class size as well as lecturers' conceptualization of and strategies for classroom teaching/learning. Since even the use of multiple recording devices should be subject to pragmatic constraints of class size and physical settings, the choice of optimal recording settings was essential. Obviously, smaller classroom settings with smaller class size are more manageable for recording.

In light of these considerations, one course was chosen from Applied Linguistics for the recording venue. The selected course was judged highly likely to accommodate the recording, since:

(1) The lecturer was an advocate for students' active involvement in classroom interaction, skilled at eliciting students' talk. There was expected to be opportunities for students to actively interact among themselves.

(2) The venue was expected to have an environment that is understanding and friendly to the proposed classroom research. Students in the course were, through their own postgraduate studies, believed to be more or less acquainted with the classroom research, and this knowledge was expected to facilitate this recording. Also, the researcher had established a social relationship with most students enrolled in the course, through informal conversations during the period of scoping and piloting. This established social condition was optimal as well for

ethnographic investigations which need to be least obtrusive to describe participants' behaviours in their natural settings.

(3) The size of the class was small enough to provide conditions where each participant could wear a mini microphone for individual recording. This would help to secure good audibility for recorded data even when interaction was concurrently occurring at multiple places.

(4) The demography of on-campus students enrolled in the course was optimal for the current research objective, which aimed to investigate multi-cultural communication between local and international students in postgraduate educational contexts.

(5) The researcher had some content knowledge with the academic topic dealt with in the chosen venue. This insider knowledge was invaluable for the analysis of elicited data with deep understanding.

A few weeks after the first observation of the target course, the researcher contacted the students, with the permission of the lecturer, to ask whether they might be willing to participate in this module of research. All of them showed their willingness in e-mail correspondence. All their consents were taken in the classroom on the day of recording. The information and consent sheets are appended (Appendix 1).`

Participants in the recording of classroom interaction were all from the same course, AX01, coordinated by the lecturer, Ian. Eight students participated in the recording. Details are shown in the table below (Table 3.6).

*Table 3.6: General profile of recording participants from Applied Linguistics*

Category	#
Lecturer	1
Native-speaker-of-English (NSE) Local Student	3
Non-native-speaker-of-English (NNSE) International Student with secondary education and/or tertiary degrees in English speaking contexts	1

Non-native-speaker-of-English (NNSE) International Student (without secondary and/or tertiary degrees in English speaking contexts)	3
Native-speaker-of-English (NSE) International Student	1
<b>TOTAL</b>	<b>9</b>

The profiles shown above is based on four binominal sets of categories (lecture/student, international/local, Native-Speaker of English (NSE) /Non-Native-Speaker of English (NNSE), with/without educational degrees in English speaking contexts). As is shown in the table, this class had four NSE students and four NNSE students. It also had three NNSE international students who had experiences of their local, non-Western style educational practices through undergraduate education. The individual details of each participant are shown below (Table 3.7).

*Table 3.7: Individual profile of recording participants from Applied Linguistics*

<b>Name</b>	<b>Category</b>	<b>Gender</b> (M= Male / F = Female)	<b>Nationality</b>	<b>First Language</b>	<b>Note</b>
Simon	NSE local student	M	NZ	English	
Rachel	NSE local student	F	NZ	English	
Sonia	NSE local student	F	UK/NZ	English	Married to a NZer husband
Naomi	NSE international student	F	South Africa	English	
Grace	NNSE International Student with secondary and/or tertiary degrees in English	F	China (Hong Kong)	Chinese	Graduated from English-medium secondary school in Hong Kong

	speaking contexts				
Sem	NNSE international student	M	Indonesia	Indonesian	
Amy	NNSE international student	F	China	Chinese	
Jasmine	NNSE international student	F	Taiwan	Chinese	
Ian	Lecturer	M	NZ	English	

The table shows that the classroom learning environment was international, with six nationalities, and at the same time that native-speakers of English still constituted half of the participants, with four out of eight student participants in total. This condition was optimal for the current research design that is sensitive both to NNSE and NSE students' behaviours in peer interaction.

### 6.3. Interviews

The original research design required three main types of interview participants: lecturers (or course coordinator), international postgraduate students, and local postgraduate students. As it turned out in the processes of piloting and scoping, however, the demography of postgraduate courses does not necessarily lend itself to the simple binary profile of international / local students. In the educational contexts of NZ, where immigrants make up a significant portion of the whole national population and international students constantly come for a range of forms of educational opportunities, postgraduate students' national, ethnic, and linguistic profiles are unyielding to any simplified categorization. For example, some international students from Asian countries come from multi-lingual living environments where education is delivered with



English as the only instructional medium at secondary- and tertiary-levels, whereas local students can be second language learners because of their immigrant status.

To address this complexity of demographic profiles, four levels of binominal categories were set up to describe participants in the current study:

- 1) Participant type: lecturer (tutor) / student
- 2) Students' language status: non-native-speaker of English (NNSE) / native-speaker of English (NSE)
- 3) Student locality: international student / local student
- 4) Secondary and (or) undergraduate degrees in English speaking contexts:                      with  
/without

Since the current research integrates comparisons among three different disciplinary educations, each discipline should have around the same number of participants to secure comparability. The researcher planned to recruit at least five lecturers, and five NNSE and three NSE students for interviewing, totalling 13 participants, from each discipline. The total number of participants would be 39. These numbers were decided on after holistic consideration of pragmatic constraints and recruitment feasibility, based on the information gathered in the research condition set-up stage.

Recruitment was carried out in multiple ways until the planned numbers of different types of participants were secured. With recourse to (1) existent social networks the researcher had established during his own postgraduate studies and scoping/piloting, (2) contact details available on the university websites, and (3) contact details in consent sheets from participants in observations, a pool of promising persons were listed up and contacted mainly via e-mail. When a candidate was found, an appointment was made to meet him/her to explain the research objectives and procedures and confirm their willingness to participate.

The next table (Table 3.8) shows the actual number of interview participants across disciplines in terms of the profile categories. Seventeen lecturers including one tutor and twenty-four students from three disciplines participated in the interviews that were intended to elicit information as to postgraduate educational practices and peer interaction opportunities.

*Table 3.8: Interview participants*

<b>Participant</b>	<b>Applied Linguistics</b>	<b>Engineering</b>	<b>Business School</b>	<b>Total number</b>
Lecturer	5	7 (including 1 tutor)	5	17
NNSE Local Student	0	0	1	1
NSE Local Student	3	2	1	6
NNSE International Student with secondary and/or tertiary degrees in English speaking contexts	1	2	2	4
NNSE International Student	4	3	4	12
NSE International Student		1		1
<b>Total number</b>	13	15	13	41

Below is the numbers of participant students categorized into three binominal sets of student profiles (Table 3.9). Seventeen NNSE students and seven NSE students participated in the interviews, which represents a difference from the planned fifteen and nine respectively. In terms of proficiency, however, one NNSE had a native-speaker level because he migrated to New Zealand at the age of eleven and received education through secondary, tertiary, and postgraduate levels, and four other NNSE students showed the advanced level of English proficiency acquired through English-medium education at secondary and tertiary level. In terms of locality, the number of local student participants (seven) was smaller than was the planned nine, but here again international student participants' complex educational backgrounds were expected to add interesting perspectives and insights into the target educational practices. Overall, the complexity of demography of interview participants was judged to be rather instrumental to describe the inter-/multi-cultural nature of educational practices in New Zealand.

*Table 3.9: student interview participants per category*

<b>Profile Category</b>	<b>Value</b>	<b>Number</b>	<b>Total = 24</b>
Student's language status	NNSE	17	24
	NSE	7	
Student's Locality	International	17	24
	Local	7	
Secondary and(or) undergraduate degrees in English speaking contexts	Without	12	24
	With	12	

## **7. Methods of the main study**

In this section, the data collection and analysis methods for the main study are designed and detailed. The design of data collection was informed by the findings on conceptual and methodological issues from scoping and piloting in the research condition set-up processes.

### **7.1. Data collection methods**

Observations of the postgraduate classroom practices, recording of students' peer interaction, and interviews with lecturers, local students, and international students, were designed as the main data collection methods for the main study. Documents such as school websites, brochures, and course outlines were gathered to complement these information sources so that the researcher would ensure basic understandings of the institutional practices of the target postgraduate education.

#### **7.1.1. Observations**

Informed of methodological and conceptual issues found in pilot observations, the observation procedure was re-designed for the main study, as mentioned in 4.3.6.5.. The objectives and conceptual framework were re-established to conduct principled observations and the method of field-note taking was renewed to better accommodate pragmatic needs and raise the robustness of the data collection.

Prior to every observation, the researcher checked the physical setting of the classroom so that he would secure the electrical outlet for his laptop computer as well as an unobtrusive position. The researcher was introduced to the students by the lecturer and allowed to explain briefly the objective and procedure of the observation. After observations, field notes taken were electronically re-formatted from the Skype software to non-editable PDF and Microsoft Word formats. The former was stored as a raw data and the latter used for analyses.

### **7.1.2. Recording of classroom interaction**

Recording was designed to elicit data from participants individually. Each of nine participants, including the lecturer, put on a lapel microphone with a portable digital audio recorder. This recording setting ensured that the researcher could follow each individual chronologically in the analysis with digital time stamps, and that some level of sound quality should be expected from each recording, when multiple sets of interaction occurred at the same time, without voices combined becoming an unrecognizable mass, which would be often the case with working just on one recording device.

The devices were given by the researcher with the switch on when each participant arrived at the classroom. Unfortunately due to the time constraints before the class, there was no time for testing the quality of each recording for each individual. Participants put on the devices during a whole class session, which was approximately 100 minutes long. After the class finished, every device was gathered, and the recorded digital data was transferred to the online cloud storage for later analysis.

### **7.1.3. Interviews**

Interviews can be categorized into three different types, structured, semi-structured, and unstructured (Mackey & Gass, 2005). Structured, or standardized, interviews have the format of asking identical sets of questions of all respondents. Semi-structured interviews have a list of questions as a guide and researchers follow the list while asking for more information as they feel needs arise. In unstructured interviews, researchers interactively explore participants' responses on the spot without any guide.

In light of the current research design, semi-structured interviews were adopted as a basic interview format. In semi-structured interviews, the researcher prepares questions prior to interviews, but with some “freedom to digress and probe for more information” (Mackey & Gass, 2005, p.173). This format was chosen because (1) its systematicity gives consistency and therefore some degree of data compatibility required for the current study, which aims to

compare three different disciplinary practices. Also (2) its flexibility allows the researcher to be contingent enough to capture and follow emergent topics that might arise during the interview. Three sets of interview guides were prepared according to three participant types: lecturer, native-speaker-of-English postgraduate students, and non-native-speaker-of-English postgraduate students. The interview guides can be found in Appendix 3.

Each interview was audio-recorded with portable digital recording devices with permission from the participant interviewee. After the interview was finished, the digital data were transferred to the online cloud storage that does not allow open access.

#### **7.1.4. Document investigation**

Documents such as school websites, brochures, and course outlines were collected to have general understandings of the institutional nature of target postgraduate courses. Some information was open to the public, available on course webpages and at school receptions. In the case of course outlines, which was often not disclosed to the public, I asked the course coordinator or lecturer to provide electronic or printed versions only if they had no issue with it. Also, the content materials, such as the textbook and other required readings, were collected for the analysis of recording data to make sure that the researcher could fully understand how participants dealt with the topics they engaged in. Information thus gathered was expected to help understand the structure, requirements, and assessment of target courses and facilitate the analysis of different sets of data.

#### **7.2. Data analysis methods**

Collected sets of data from a range of sources were analysed, drawing on Grounded Theory (Glaser & Strauss, 1967), which provides a principled way of analysing qualitative data from different sources. Grounded Theory generally refers to inductive approach to the generation of knowledge with a set of principles and techniques for data collection and analysis (O'Reilly, 2008; Belgrave, 2014). It aims to produce a theory grounded in data, characterized by its

integration of data collection and analysis (theoretical sampling), and staged, systematic construction of a theory (coding). Since the original creation of Grounded Theory by Glaser and Strauss (1962), it has traced diverging paths, backed up by different theoretical frameworks. O'Reilly (2008) argues that Grounded Theory has a range of epistemological influences, such as from constructivist, positivist, and interpretivist and that it can be adaptable for different approaches. O'Reilly also points out that ethnography has many methodological elements in common with Grounded Theory, among which are flexibility of data collection/analysis and utility for diverse types of data (Belgrave, 2014).

One of the techniques for generating knowledge/understanding in Grounded Theory approach is its staged system of coding (Corbin & Strauss, 2008). It begins with Open Coding, which excludes any pre-conceived concepts or hypotheses so that emergent codes should be solely grounded in data. Next stage is Focused Coding, where data is viewed and reviewed against established codes, and codes themselves are also constantly compared for any possibility of integration into another established or new code. Axial Coding is a process in which, based on their properties, codes are linked together to generate broader categories. These stages do not necessarily follow a linear, non-circular pathway but the process of producing a final product takes on the iterative nature.

Although it is well-known for its methodological innovation of synthesizing data collection and analysis processes, Grounded Theory should not have to completely exclude the capability of differentiating data collection and analysis processes. The current research draws on Grounded Theory to inform and benefit some parts of the data analysis processes, specifically, coding processes, removed from data collection.

All the available data from interviews, field notes, documents, and recording were coded following guidelines of Grounded Theory. Different data sets were triangulated among one another to gain ethnographically thick descriptions of educational peer interaction across disciplines as well as a theory of how peer interaction opportunities are conceptualized, created, and utilized in different disciplinary/educational communities.

Observation data and discourse data were also quantitatively analysed to complement the qualitative data analysis, specifically, to identify the distributions of different peer interaction types across disciplines as well as personal differences in active and collaborative learning in a

discussion task. How many times particular peer interaction types were observed in each discipline and how many times each student implemented particular communicative functions in a discussion were counted and compared to understand how variables such as discipline and personal learning style would impact on active and collaborative learning in postgraduate educational practices.

## **8. Ethics**

Because of the nature of ethnography, which let me enter into the natural environments of target practices to observe cultural behaviours, substantial ethical attention was paid throughout each stage of the research, including research design, data collection, and research dissemination.

Firstly, an approval was granted by the Victoria University Human Ethics Committee. Secondly, throughout the main data collection stage, I obtained consents from all the participants in observation, recording, and interviews. Participants were given information sheets and opportunities to ask questions before giving their consents. The consents and information sheets were also through the review of the Human Ethics Committee. Thirdly, participants were given maximum security of their private information. In the current thesis, they have pseudonyms and no details are shown that could lead to personal identification.

## **9. Chapter conclusion**

This chapter has discussed how the current research conceptualizes and approaches an investigation into peer interaction opportunities in postgraduate educational practices. The modules and processes of the research condition set-up were detailed as essential components of the current research to optimize the main study in terms of conceptual framework and methodology of data collection and analysis. The methods of the main study were also provided and discussions on its ethical sensitivity were made. The next four chapters will present the findings from the data collection and analyses.



## **Chapter 4: Identification of Peer Interaction Opportunities in Postgraduate Courses**

### **1. Introduction**

This chapter presents the findings in response to the first research question raised at the end of Chapter 3, which is;

*What types of peer interaction opportunities occur in postgraduate educational environments and how differently do they occur across disciplines?*

Answers to this question are expected to help NNSE international students adapt to the practices of new educational environments which are abundant in opportunities for students to collaboratively manage the development of their learning.

To answer this question, multi-sourced qualitative data, specifically, observation field notes, and interview data from lecturer and student interviewees, were thematically analysed and also quantitatively assessed. The descriptions of the data aim to give general understandings of the practices of the target postgraduate education in terms of how active and collaborative learning can be realized in the form of peer interaction.

This chapter is organized in the following ways: Firstly, the conceptual framework is shown to establish the relation between communicative events and peer interaction opportunities. Secondly, each type of identified peer interaction is defined. Thirdly, distributions of identified types will be compared across disciplines. And lastly, disciplinary profiles of postgraduate peer interaction are made to conclude this chapter.

### **2. Conceptual framework for identification of peer interaction types**

In this section, the conceptual framework for identifying different peer interaction types is presented. This framework is based on the provisional framework that was developed earlier in the research process (see Chapter 3, Section 4.3.6.5.). While the provisional framework was

constructed solely on the basis of the hypothesis made from pilot classroom observations, the final framework is informed by and grounded in the large sets of observation, interview, and document data gathered in the main investigation. Below is the table that shows the conceptual framework for identification of different types of face-to-face oral peer interaction (Table 4.1).

*Table 4.1: Conceptual framework for identification of peer interaction types*

Learning Setting	Learning Mode		Identified Peer Interaction Type
In-Class Learning	Lecture Mode		Covert
	Interactive Lecture Mode		Voluntary
	In-Class Task Mode	Presentation	In-Presentation
		Individual	Private
		Collaborative	In-Class Task
Out-of-Class Learning	Out-of-Class Task Mode	Individual	Study Pair/Group
		Collaborative	Out-of-Class Task

This framework is constructed of a range of variables to which different interactional structures are attributed and in which different types of peer interaction can be identified. The three parameters are given for this framework: learning settings, learning modes, and interaction categories. The following sub-sections will detail these parameters.

## 2.1. Learning settings

Three kinds of physical learning settings were identified in the data, which are *In-Class Learning*, *Out-of-Class Learning*, and *Online Learning*. In this study, a ‘class’ is defined as a communicative space for face-to-face learning attended both by the lecturer and by students

synchronously at some temporal point. It is as opposed to ‘Online Learning’, for synchronous or asynchronous interaction among the lecturer and students, at some designated online space where any participant has access to what others put there. ‘Out-of-Class Learning’ is defined in this study as individual or collaborative learning out of such designated shared space as classrooms. In the current study, which focuses on face-to-face oral interaction among students, interaction opportunities in Online Learning are beyond the scope of the study, and so are not addressed in Table. 4.1.

## **2.2. Learning modes**

Learning modes are determined by what the lecturer or course coordinator expect students to engage in for set pedagogical objectives. Through classroom observations, three categories emerged as general learning modes: *Lecture Mode*, *Interactive Lecture Mode*, and *Task Mode*. In *Lecture Mode*, the lecturer’s main aim is to inform students of targeted academic knowledge and skills or necessary information for the pursuit of learning activities. In *Interactive Lecture Mode*, the lecturer and students interact in the whole class setting for various purposes, such as the confirmation of understandings, the solution of emergent problems, the discussion of raised problems, and the addition and edition of essential information. Both lecturers and students can initiate this learning mode. For example, lecturers may start Interactive Lecture Mode by simply asking students questions or appointing a student to elicit relevant information. Students also can take initiatives to create this learning mode in the middle of Lecture Mode to comment on the lecturer’s discussion or ask questions. Turns are taken back and forth between the lecturer and students during this mode. In *Task Mode*, students engage in activities specified by the lecturer for a designated time period. Task Mode is indexed by its subcategories as *Presentation Task Mode*, *Individual Task Mode*, and *Collaborative Task Mode*. In Presentation Task Mode, students are asked to make a presentation, individually or collaboratively, for which they have prepared prior to the assigned time slots. Individual Task Mode and Collaborative Task Mode are differentiated in terms of participant structure when students engage in some activity given by the lecturer. In Individual Task Mode, each student individually engage in a task, while Collaborative Task Mode requires students to talk or work in a pair or group.

Another general learning mode, *Out-of-Class Task Mode*, was also identified in the out-of-class learning setting. In this learning mode, Students are asked by the lecturer to work outside of the class to generate some products which are to be evaluated for grades, or to make a preparation regarding what a particular class will address (e.g. required readings or preparation for an assigned presentation). Out-of-Class Task Mode is subdivided into Individual and Collaborative modes.

Besides these learning modes, interview and observation data showed that additional learning modes can occur with interaction between students and lecturers. In Task Mode in the classroom, for example, students were frequently observed to be interacting with the lecturer for a range of purposes, for example, to clarify the specification of the task nature or to solve emergent cognitive issues. In the out-of-class learning setting as well, student interviewees mentioned that they utilized office hours and e-mail correspondence to contact and interact with the lecturer to obtain a helping hand to sort out emergent issues. These communicative events are interesting topics to investigate, but they are out of the scope of the current study as the interaction happening in these modes is basically not among peers but between students and the lecturer. The established conceptual framework is to identify peer interaction and so does not address these learning modes.

### **2.3. Interaction categories**

Two general interaction categories were confirmed to be happening in the target educational practices, as had been expected prior to the launching of the investigation. These interaction categories are *Hierarchical Interaction*, where the lecturer interacts with students, and *Peer Interaction*, where students interact among themselves. While the established conceptual framework is sensitive to this distinction, the description in Table 4.1 is intended to highlight the peer interaction category, which is the target phenomenon of the current study, so that it does not show explicitly how hierarchical interaction can occur.

The three parameters described above (learning setting, learning mode, and interaction categories) and their set values provide a framework for identifying peer interaction opportunities in communicative events. This conceptual frame distinguishes when different types

of peer interaction can occur in and outside of the classroom. The following sub-sections detail what types of peer interaction were identified across different learning settings and modes.

### **3. Peer interaction types identified in postgraduate learning**

Through the interviews and observations, seven categories (Covert, Voluntary, In-Presentation, Private, In-Class Task, Out-of-Class Task and Study Pair/Group) emerged as peer interaction types. These peer interaction opportunities were differentiated in relation to two learning settings (In-Class and Out-of-Class), and four learning modes (Lecture, Interactive Lecture, Task, Out-of-Class Task), as shown in Table 4.1 in Section 2. Firstly, the peer interaction types which occur in class, and then the types which occur out of class, will be described.

#### **3.1. Peer interaction types in In-Class Learning Setting**

Through the analyses of observations and their field note data, five types of peer interaction were identified in in-class learning contexts: Covert, Voluntary, In-Presentation, Private, and In-Class Task, in the order of appearance in Table 4.1. Each of the peer interaction types is connected to a different learning mode, as shown in Table 4.1.

##### *Covert Type*

The Covert Type of peer interaction was very frequently observed in Lecture Mode in the large classroom contexts such as the lecture theatre or large seminar rooms. In these learning environments, students were drawing upon each other as their own resources to address some seemingly emergent issues without having to involve the lecturer. This covert kind of interaction was carried out quietly in an effort not to be heard by the lecturer nor bother other students.

It should be noted that, technically, Covert Type can occur in other learning modes than Lecture Mode if peer interaction is happening when it is not supposed to happen. For example, it is feasible for students to talk to each other in a low voice not to be heard by others while the

lecturer and other students are actively involved in a whole class discussion. However, in this study, this type was only identified in Lecture Mode throughout the observations and never occurred in other modes. The decision was then made to connect this type of peer interaction with Lecture Mode.

### *Voluntary Type*

In Interactive Lecture Mode, or a whole class discussion mode, students were observed to start peer interaction with other students and the lecturer as listeners. This type of peer interaction is Voluntary, which starts based on students' initiatives in the middle of hierarchical interaction between the lecturer and students. In this case, a lecturer and a student are involved in interaction and another student joins them, and with the lecturer as a listener, the first student and this new participant start conversations with each other. This peer interaction will continue until some sort of intervention is decided on and carried out by the lecturer and the nature of interaction returns to a hierarchical one.

### *In-Class Task Type*

In-Class Task Type peer interaction occurs when the lecturer asks the students to be collaborative on some task, questions, or problem. The lecturer explains the procedure and often objectives of the activities. Typical examples are pair/group discussions. In contrast to Voluntary Type, which is initiated by students, In-Class Task Type peer interaction is based on a lecturer's decision makings.

### *In-Presentation Type*

In-presentation Type peer interaction was observed during the presentation activity in Task Mode. In the middle of or immediately after a presentation, students voluntarily asked questions of or gave some feedback to the presenter. Since presentation was being made by students in Task Mode, interaction between the presenter and other students constituted peer interaction.

### *Private Type*

Private Type peer interaction was observed to be occurring while students were supposed to engage in some individual work. When students identified some issues which were not likely to be sorted out individually, they drew on their peers without the lecturer's explicit direction to do so. In the Business School, for example, students were found very frequently in this type of peer interaction while they are engaging in individual tasks on their desktop PCs in the laboratory setting. In this setting, students were getting up and walking around the room to communicate with other students to help one another with their tasks. The lecturers did not particularly verbally encourage students for this mutual support but students voluntarily created this collaborative learning environments.

## **3.2. Peer interaction types in Out-of-Class Learning Setting**

Through the interview data, there were two types of peer interaction found to occur in out-of-class contexts: Study Pair/Group and Out-of-Class Task. These two types can be distinguished in terms of whether they are required to be done as a task or not.

### *Study Pair/Pair Group Type*

Study Pair/Group Type Peer Interaction is created and utilized when students feel a need to address emergent issues while they are doing the individual task. They voluntarily form a pair or group to address a range of needs, such as problem solutions in assignments or class preparation, or information sharing for resources. Students from MPE program in Business School said that they always sat close to each other in the library and helped each other by casually visiting their work stations when the need arose.

### *Out-of-Class Task Type*

Out-of-Class Task Type occurs when postgraduate students are required to generate some products in a collaborative way outside of the classroom, which are usually to be assessed in some way. In one course in Applied Linguistics, students were required as an assignment to form a group and design and administer a test for language proficiency program students. In Engineering, a team project was found through the interviews to be quite commonly practiced.

### **3.3. Summary of peer interaction types**

The seven peer interaction types (Covert, Voluntary, In-Presentation, Private, In-Class Task, Study Pair/Group, and Out-of-Class Task) were found to occur in class and out of class in postgraduate course learning contexts across disciplines. These identified peer interaction types are the answer to the first part of the research question, *‘What types of peer interaction opportunities occur in postgraduate educational environments and how differently might they occur across disciplines?’* These peer interaction types were also found to be connected to different learning modes (Lecture, Interactive Lecture, Presentation Task, In-Class Individual Task, In-Class Collaborative Task, Out-of-Class Individual Task, and Out-of-Class Collaborative Task). The next sections will provide the findings regarding the second part of the research question, which focuses on disciplinary differences and cross-disciplinary commonalities in the occurrences of different peer interaction types.

## **4. Distribution of different peer interaction types across disciplines**

In this section, the occurrences of different peer interaction types across three disciplines are reported to give an answer to the second part of the research question, *‘What types of peer interaction opportunities occur in postgraduate educational environments and how differently might they occur across disciplines?’* Qualitative as well as quantitative analyses of data will be presented. Table 4.2 below provides general profiles of occurrences of different types of peer interaction across disciplines.



Table 4.2: Disciplinary profiles of peer interaction opportunities

Variable		Discipline				Total (course)
Learning Mode	Peer Interaction Type	Applied Linguistics (5 courses observed)	Engineering (5 courses observed)	Business School (5 course observed; 1 course overlapping between MAF/MPE and MBA)		
				MAF/MPE (3 courses observed)	MBA (3 courses observed)	
Lecture	Covert	Rare	Rare	Frequent	Frequent	
Interactive Lecture	Voluntary	5	4	0	0	9
Presentation Task	In-Presentation	0	1	0	0	1
Individual Task	Private	0	0	2	0	2
In-class Collaborative Task	In-Class Task	5	0	0	1	6
Out-of-class Collaborative Task	Out-of-class Task	1	2	0	3	6
Total		11	7	2	4	15

Table 4.2 shows that the distributions of peer interaction are uneven across types and disciplines. In terms of type, Voluntary outnumbered other types, observed in nine courses in total, while In-Presentation Type and Private Type are two among the least observed. As for discipline, Applied Linguistics courses were found to have more peer interaction opportunities than Engineering and the Business School. In the following sub-sections, the occurrence of each peer interaction type is compared among three disciplines, and a profile of each discipline is created to describe the nature of its educational practice in terms of how collaborative learning was realised.

#### **4.1. Distribution of Covert Type peer interaction**

The occurrences of this Covert type across disciplines are not quantitatively addressed but impressionistically described in this section. The reasons for this decision is that it was methodologically difficult to count its occurrence. This type of peer interaction often happened in multiple places in a large classroom setting at the same time in Lecture Mode, which means that it was very hard for the researcher to record its occurrence and duration single-handedly. Also, with a focus on educational peer interaction and students' talk on academic topics and learning, the researcher could not accurately identify the occurrence of Covert Type peer interaction, as it was impossible to know exactly whether the content of students' covered talk was relevant to what the lecture was about.

With this methodological issue, however, the researcher had the impression that the Covert Type of peer interaction was happening very often in class in Business School when the class was in Lecture Mode. Typically, two students were observed to be talking with each other very briefly in a low voice while the lecturer was speaking or writing on the whiteboard. While there were continuous identifications of peer interaction of this type in large classrooms of Business School, in small classrooms of Applied Linguistics and Engineering, there was no occurrence observed of Covert Type peer interaction. Physical setting clearly influenced the occurrences of this types of peer interaction. Large classrooms seemed to accommodate Covert Type more than small classrooms because the behaviour was less obtrusive in the former setting.

#### **4.2. Distribution of Voluntary Type across disciplines**

Findings from quantitative analyses are provided here to look at how Voluntary Type peer interaction occurred in the postgraduate classrooms across disciplines. Based on the observation field note data, occurrences for Voluntary Type were counted and its frequencies and durations were calculated. In the process of the coding, however, there was sometimes a difficulty in identifying Voluntary Type in a clear way. For example, there were instances of interaction in which turns were taken in the order of a student, another student, and the lecturer. In the case that the researcher clearly identified peer interaction on the field, a note was made to

index its occurrence, but sometimes it was hard to tell from the turn structure and gestures whether it was actually peer or hierarchical interaction. In those cases, the researcher just noted who the turn takers were. This sort of instance was categorized in the later analysis of field note data as Ambiguous, whereas the ones judged to be free from such ambiguity were grouped into Unambiguous. A sample of the field notes is appended (Appendix 2).

The table below (Table 4.3) shows how Voluntary Type peer interaction occurred during the observations. In Applied Linguistics, the total duration of 510 seconds of Voluntary peer interaction was identified out of 349.5 minutes of observations, while, in Engineering, the figure was 480 seconds out of 370 minutes. There was no Voluntary peer interaction observed in Business School.

*Table 4.3: Disciplinary profiles of Voluntary Type Peer interaction*

<b>Discipline (Lecture/Interactive Lecture Mode Time)</b>	<b>Voluntary Type Subcategory</b>	<b>Occurrence (Frequency)</b>	<b>Total Duration</b>	<b>Average Duration</b>
Applied Linguistics (349.5 minutes)	Unambiguous	10  (once every 34.95 minutes)	510 seconds	51 seconds
	Ambiguous	2  (once every 324.75 minutes)	30 seconds	15 seconds
	Total	12  (once every 29.1 minutes)	540 seconds	45 seconds
Engineering (370 minutes)	Unambiguous	11  (once every 33.6 minutes)	465 seconds	42.3 seconds

	Ambiguous	1	15 seconds	15 seconds
	Total	12 (once every 30.8 minutes)	480 seconds	40 seconds
Business School (751 minutes)	Unambiguous	0	0	0
	Ambiguous	0	0	0
	Total	0	0	0
Total				

Note: Duration is measured in the unit of 15 seconds.

The most striking difference across the three disciplines was the distribution of Voluntary Type in the Business School classes compared with the other disciplines. In the Business School, no Voluntary Type was found during the 751 minutes of Lecture and Interactive Lecture Mode. On the other hand, both in Applied Linguistics and Engineering, this type occurred in their Interactive Lecture Modes, 12 times each. Ambiguous Voluntary Type occurred twice and once in Applied Linguistics and Engineering respectively.

Secondly, Table 4.2 clearly shows a similarity between Applied Linguistics and Engineering in the distribution of Voluntary Type. In Applied Linguistics, an Unambiguous peer interaction occurred every 34.95 minutes and totally Voluntary Type occurred every 29.1 minutes with an average duration of 45 seconds, while in Engineering an Unambiguous occurred every 33.6 minutes and in total Voluntary Type occurred every 30.8 minutes with an average duration of 40 seconds. Both disciplines saw one occurrence of Voluntary Type in approximately every 30 minutes, around 40 to 45 seconds of duration, while the whole class is involved in lecture or interactive lecture modes. Thus no noticeable disciplinary difference in the profile of Voluntary Type peer interaction was identified between Applied Linguistics and Engineering.

One major consideration for the occurrence of Voluntary Type is that, in its definition, the whole class is involved in the ongoing peer interaction as one big group. While the Voluntary Type peer interaction is occurring, other students, and the lecturer as well, are supposed to be

listening to their peers negotiate their learning so they themselves can learn from the interaction. To make this opportunity for participation equally distributed among all students in the classroom seems to require some physical conditions to make sure that all possible verbal exchanges are heard anywhere in the classroom without any difficulty by all those present. Obviously, large classroom settings, which are common in the Business School, pose a major constraint on this kind of peer interaction, whereas small classroom settings seen in Applied Linguistics and Engineering can accommodate the whole class discussion mode much more easily. The difference in physical settings between Business School and the other two disciplines as well as the physical similarity between Applied Linguistics and Engineering might partly explain the identified occurrences of Voluntary type, as the realization of students' proactive involvement in the postgraduate learning.

#### **4.3. Distribution of In-Class Task Type across disciplines**

In-Class Task Type peer interaction occurs in a classroom collaborative task (Table 4.1). Two subcategories were identified in the observations and labelled as Unscaffolded and Scaffolded. Unscaffolded is defined as the sub-type of In-Class Task Type peer interaction in which there is no participation or intervention by the lecturer. In this type of task, the students manage all aspects of the task once they commence. The lecturer does not intervene in any way while students are engaging in a pair/group task and the whole interaction constitutes In-Class Task peer interaction. In Scaffolded, on the other hand, the lecturer participates in students' pair/group conversations. Table 4.4 below shows the occurrences of Task Type across different disciplines.

*Table 4.4: Disciplinary profiles of In-Class Task Type peer interaction*

<b>Discipline</b>	<b>In-Class Task Type Peer Interaction Subcategory</b>	<b>Occurrence (Number of Times)</b>	<b>Total Duration (Minutes)</b>	<b>Average Duration (Minutes)</b>

Applied Linguistics	Unscaffolded	6	25	4.17
	Scaffolded	8	125.5	15.69
	Total	14	150.5	10.75
Engineering	Unscaffolded	0	0	0
	Scaffolded	0	0	0
	Total	0	0	0
Business School	Unscaffolded	4	20	5
	Scaffolded	1	5	5
	Total	5	25	5
<b>Total</b>	<b>Unscaffolded</b>	<b>10</b>	<b>45</b>	<b>4.5</b>
	<b>Scaffolded</b>	<b>9</b>	<b>130.5</b>	<b>14.5</b>
	<b>Total</b>	<b>19</b>	<b>175.5</b>	<b>9.24</b>

As is clear from Table 4.3, Applied Linguistics stands out in terms of the use of the sort of tasks that requires students to interact among themselves. All the five lecturers were observed to utilize some sorts of peer tasks in their classes. This frequent use of collaborative tasks in Applied Linguistics makes a stark contrast to the classroom practices in Engineering and the Business School. In Engineering, no lecturer was observed giving any specific collaborative task to students, and in Business School only one lecturer used peer tasks frequently. In both schools, most of the class time was dedicated to lecture and interactive lecture modes, where information presentation and negotiation for comprehension were the main foci.

As for a comparison between Applied Linguistics and Business School, the table shows that while both Unscaffolded and Scaffolded were found in these two disciplines, a small distinction might be drawn. In Applied Linguistics, lecturers were more actively involved in students' implementation of tasks, while in the Business School, students were generally left to manage the task on their own. One likely cause of this is the physical settings for each discipline. Applied Linguistics courses had small classroom settings with up to nine students, whereas

Business School classes were held in Lecture Theatres or large seminar rooms, each with the capacities of accommodating 50 students at least. I noticed through observations that it was easy for Applied Linguistics lecturers to monitor or participate in each of the group talks for a brief period of time in these small classrooms, while in the case of Business School the only lecturer that used peer tasks might have some difficulty even if he wants to monitor or scaffold all their students in their talks, given that the student population and number of groups are larger. So it was understandable for the lecturer to decide to stay put around the podium and let his students manage themselves while they are engaging in peer activities.

#### **4.4. Distribution of In-Presentation Type peer interaction across disciplines**

A presentation activity was identified in one out of the fifteen courses observed and confirmed for another in interviews (see Table 4.5 below), both of which were Engineering courses with their small classroom settings and small student population (4 and 6). One of the Engineering courses uniquely set up students' presentations as the core activity for its entire learning structure. Every week for the first segment of the two-hour class, some students made presentations on assigned academic topics which required them to prepare quite extensively. For the second segment, all students were asked to inform other students and the lecturer about their ongoing project in the presentation style using the computer and big monitor screen in the specially designed computer lab. Observed presentations both in the first and second segments of the class were complemented by active interaction between the presenter and other students and/or the lecturer, and also occasionally supplemented by a short lecture only if the lecturer decided there was a need. In another course, each student was also required to make two presentations in total during the three-month course; firstly on their ongoing projects and secondly on final products.

*Table 4.5: Occurrence of In-Presentation Type peer interaction across disciplines*

<b>Disciplines</b>	<b>Course identified for In-Presentation Type peer interaction</b>
Applied Linguistics	0 course
Engineering	2 courses
Business School (MBA/MPE/MAF programs)	0 course

Another interesting finding about the presentation activity from interviews with Business School lecturers was variation across different postgraduate programs in the discipline. The same lecturers who did not give presentation tasks to their students in their professional programs such as MBA, MPE, and MAF nevertheless required students in other research-oriented Master's or Honours programs to do individual or group presentations. Here within-disciplinary variation was found in the implementation of the presentation task across different educational programs aimed at different groups of students. Other considerations around this variation is the difference in physical settings and student population. MBA, MPE, and MAF classrooms were mid- or large-sized with a sizable population of students, while other Master's and Honours programs were typically held in small classroom settings with a relatively small number of students.

#### **4.5. Distribution of Private Type peer interaction across disciplines**

Occurrences of Private Type peer interaction, which were found to occur when students help each other while they are supposed to be individually engaging in a task, are reported in Table 4.6.



*Table 4.6: Disciplinary profiles of Private Type peer interaction*

<b>Discipline</b>	<b>Total Classroom Observation Time</b>	<b>Time Duration for Individual Task Mode</b>	<b>Occurrence</b>
Applied Linguistics	500 minutes	0	0
Engineering	370 minutes	0	0
Business School	1030 minutes	279 minutes	221 times

This type of peer interaction was only observed under a specific physical condition for MAF/MPE programs in Business School. In the computer laboratory room, students were given individual work stations with desk-top computers to use software to practice theory applications. This individual activity constituted significant parts of the two days of observed intensive classroom learning (95 out of 360 minutes for one day and 184 out of 370 minutes for the other), totalling 279 minutes. Most students were found to be drawing on one another for support, frequently getting up and approaching another work station for a brief talk or conversing across aisles and computers. In total, 86 occasions of this type were identified in 184 minutes from one course and 135 in 95 minutes from the other, totalling 221 occurrences. This learning mode is categorized into Individual Task Mode in the current analytical framework (Table 4.1). It should be noted that the particular physical setting afforded students easy mobility for mutual communication, which is not the case in the setting such as a lecture theatre, where it is hard for students to move out of their seats.

#### **4.6. Distribution of Out-of-Class Task Type peer interaction across disciplines**

Disciplinary profiles were also created for peer interaction opportunities outside of the classroom. Data was drawn from interviews with lecturers and students. Below is the summary of relevant findings from the interview data as to the distribution of Out-of-Class Task Type peer interaction (Table 4.7).

*Table 4.7: Disciplinary profiles of Out-of-Class Task peer interaction*

Discipline		Summary of Occurrence of Out-of-Class Task Peer Interaction
Applied Linguistics		Uncommon
Engineering		Often
Business School	MAF/MPE	Very little
	MBA	Institutionally compulsory

As the profiles above show, the occurrence of Out-of-Class Task Type are different across disciplines/programs. Applied Linguistics as a whole has a clear orientation towards individual work outside of the classroom, with just one course identified that required students to engage in out-of-class peer work. In Engineering and Business School, it was not uncommon to give students peer work that should be managed and done autonomously outside of the class. Business School was found to vary in the practice of out-of-class peer tasks from program to program. MBA obligates students to form a semi-permanent group that should work together on assignments across courses throughout the program, while MPE and MAF do not have such an institutional requirement. The motivation behind the institutionalization of out-of-class peer tasks in MBA program will be provided in next chapter on lecturer motivations.

#### **4.7. Distribution of Study Pair/Group Type peer interaction across disciplines**

The distribution of Study Group Type was unclear in the current data sets. It was difficult to estimate under the current methodology how often this type can occur across disciplines, because it is voluntary and would not be observed in classes. However, interviews with student and lecturer participants suggest that it actually happened among some students, and that the

lecturer appreciates students' proactive willingness to support one another in their learning in the form of study group.

## **5. Conclusion and summary; disciplinary profiles of postgraduate peer interaction opportunities**

This chapter has reported the findings regarding the first research question '*What types of peer interaction opportunities occur in postgraduate educational environments and how differently might they occur across disciplines?*' The identified types of peer interaction were described in relation to learning settings and modes, and the occurrences of each type was compared among disciplines.

As a summary, I will present ethnographic profiles of peer interaction opportunities for each discipline in order to give a more holistic view of disciplinary practices.

### **5.1. Applied Linguistics**

In its small classroom settings, a relatively small number of students and the lecturer interacted actively during the information transition/sharing mode of learning. Students were willing to join in the interaction between the lecturer and another student to ask questions or offer information they have. The lecturer quite often and universally gave students further opportunities in class to interact among themselves on collaborative tasks and the lecturer often joined in students' interaction. Most educational peer interaction opportunities occurred during the class time. One exception was a course that required students to collaboratively create some artefact as an assignment, which required them to meet up out of class time. Overall, Applied Linguistics provided plenty of opportunities for students to develop their learning through active and collaborative learning.

## **5.2. Engineering**

In Engineering, as in Applied Linguistics, small classrooms were chosen to be educational venues. The number of students was relatively small and they were observed to be interacting actively with the lecturer during the information transition/sharing mode and also with other students while sharing their ideas and mutually asking and answering questions. No collaborative nor individualized task was given during the class time, and the whole class consisted of lecture and interactive lecture modes. Outside of the classrooms, however, collaborative tasks were given in many courses that required students to engineer some products in teams. In this way, active and collaborative learning was incorporated into the postgraduate educational practice in this discipline.

## **5.3. Business School (MAF/MPE)**

Classes were relatively large (with around 25 students present) and mid-size lecture theatres/large seminar rooms and computer laboratories were used as classrooms. Other than courses on a weekly basis, the program provided three-day intensive courses for professional part-time students to accommodate their busy schedules and distant residential locations. In the intensive courses, lectures were given in seminar rooms and individualized tasks were set for work in the laboratory. In large seminar room settings, students engaged in information reception, interacting with the lecturer. There was no opportunity for peer interaction among the students except communicating with one another in a covert way. On the other hand in the computer laboratory, students were observed to be frequently drawing upon the lecturer as well as one another as resources to complete assigned individual tasks requiring high technical skills. Overall, the introduction of active and collaborative learning seems to be heavily constrained by the physical settings in this discipline.

## **5.4. Business School (MBA)**

Classes were relatively large (typically 20 to 30 students) and so held in mid-size lecture theatres. The students were actively interacting with the lecturer, while they were also found to

be drawing upon peers next to them in a covert way through the course of class periods but no formal peer discussion was identified in the form of a whole classroom discussion. However, distinct teaching styles were observed among the lecturers, such as lecture style, interactive lecture style, and task-based approach. Out-of-class group activities, assessed or unassessed, were institutionally compulsory. The program required students to form a semi-permanent group when they enrolled, and recommended that they work together in as many courses as possible to optimize the benefit of this set group. Collaborative learning was thus institutionalized in this disciplinary education.

These brief summaries holistically show differences in general profiles of educational practices and peer interaction opportunities across disciplines and programs as well as how differently active and collaborative learning are practiced across disciplines. In the next chapter, findings from interview data will be utilized to uncover teachers' belief systems around the learning modes they set up in and outside their classrooms and how these differences can be realized in their educational practices.

# Chapter 5: The Lecturers' Motivations behind Setting up Learning Modes

## 1. Introduction

Chapter four presented seven types of peer interaction (Covert, Voluntary, Private, In-Class Task, In-Presentation, Student Pair/Group, and Out-of-Class Task) in postgraduate courses and how differently these types are distributed across the three disciplines (Applied Linguistics, Engineering, and the Business School). These seven peer interaction types were found to be connected with different learning modes (Lecture, Interactive Lecture, In-Class Individual Task, In-Class Collaborative Task, Presentation Task, Out-of-Class Individual Task, and Out-of-Class Collaborative Task). Based on the hypotheses that learning modes are selected by the lecturers and that each learning mode constitutes a condition for a different type of peer interaction, this chapter explores what motivations are behind the lecturers' choice of learning modes. By focusing on the lecturer's involvement in the creation of peer interaction, this chapter addresses the second research question raised at the end of Chapter 2;

*What factors can be involved in the creation and utilization of peer interaction in postgraduate educational practices across disciplines?*

The knowledge generated from this study regarding the lecturers' motivations to choose different learning modes is expected to help deeply understand the nature of communicative events as conditions for peer interaction to occur. It will also inform EAP learners of educational expectations that might not necessarily be the same as theirs. The knowledge will thus facilitate EAP learners in their socialization into the new educational practices.

To collect data to answer this question, semi-structured interviews were conducted with 17 lecturers (including one tutor) from Applied Linguistics, Engineering, and Business School. Questions were asked in interviews regarding what were lecturers' motivations for setting up different learning modes, how they viewed collaborative learning in postgraduate education, and how they viewed the participation of international students in different learning modes. Before conducting each interview, the researcher observed a postgraduate class taught by the interviewee. The interview data was thematically analysed under the guidance of Grounded

Theory method (Chapter 3 Section 7.2.). Students' interview data and observation data were triangulated into the analyses of lecturer interview data.

This chapter is outlined in the following way: Firstly, themes and categories that emerged through the qualitative analyses will be introduced and an analytical frame is made on the basis of the categories. Secondly, findings will be described regarding lecturers' motivations and justifications behind the choice of each learning mode and accompanying peer interaction type. Lastly, disciplinary profiles of lecturers' educational methodologies will be created on the basis of the findings.

## **2. Themes and analytical framework**

Three general themes emerged from the qualitative analysis of interview data: *learning objectives*, *the lecturer's pedagogical beliefs* and *physio-temporal conditions*. These themes reflect the lecturers' stated justification for choosing particular learning modes. The themes were then conceptualized into a framework for holistically understanding lecturers' choices of learning modes. The following section will provide the description of each theme.

### **2.1. Learning objectives**

This theme addresses what should be learned by students in programs, courses, or classes from the perspective of education providers (e.g. program and course coordinators, lecturers). The education providers select and set up learning objectives in the form of relevant disciplinary as well as social knowledge/skills for a targeted student population. This selection was found to impact on the choice of learning modes. Three sub-themes were found in this category; *disciplinary essentials*, *students' existent knowledge/skills and study level* and *future relevance*.

### **2.1.1. Disciplinary essentials**

According to lecturer interviewees, some knowledge and skills sets are essential to their disciplines. Noticeable examples identified are the skill of creating artefacts based on source code writing for software in Engineering and a mathematical proof of a financial theory for MAF in Business School. The nature of these disciplinarily essential learning objects can impact on the choice of which learning modes should be taken by lecturers. The following quote is an example of disciplinary essentials:

I don't think there is any group work. Most of them are individual work. And because this one, you, because, you know, uh, uh, uh, because, you know, this one, most of the time, you know, use the computer and then all data available in there, you just analyse by yourself. (Sung, Lecturer, Finance, Business School)

### **2.1.2. Students' existent knowledge/skills and study level**

Students bring into their studies relevant knowledge/skill sets as resources necessary for the development of the target academic knowledge and skills. These resources include knowledge/skills gained from their past personal and professional experiences as well as academic knowledge/skills acquired through prior studies. The lecturer and program coordinator have these resources in mind when they decide to choose learning objectives and pedagogical methodologies. The following quote is an example of students' existent knowledge/skills and study level:

I wouldn't expect 100 level (undergraduate) students necessarily to have the capability to analyse a problem.....whereas at 400 level we're like, 'OK this is why this is not right, this is what we have to do about it. (Tim, Lecturer, Engineering)

### **2.1.3. Future relevance**

Postgraduate learning objectives were sometimes found to have direct relevance to activities in some intended target situations, academic research or real-world work. For example,



Applied Linguistics provides courses that prepare students for their future academic research as well as courses more oriented towards professional practice as an English teacher. In the following quote, an Engineering lecturer explains why he requires his students to engage in cross-disciplinary team projects, which is an example of future relevance:

Because often industry, groups especially in computer science or engineering, they are actually cross-disciplinary. People with different skills, different backgrounds, and if the only people you can relate to are just like yourself, then you're gonna have a problem in the industry. (Evan, Lecturer, Engineering)

## **2.2. The lecturer's pedagogical beliefs**

Lecturers often have their own pedagogical beliefs as to how academic knowledge and skills should be learned to ranging degrees that impact on the conceptualization of learning and teaching. In some cases, these beliefs are shared institutionally and established as social practices. For example, the MBA program in the Business School has group learning integrated into their program and all the MBA students are required to engage in various learning activities in a team. In the following quote, an Applied Linguistics lecturer discusses his belief in Lecture and Interactive Lecture modes (= teacher-fronted learning or teaching) in his classroom.

I don't really believe that student-centred learning is the only way to go.

I don't really believe that teacher-fronted learning or teaching is the bad thing. (Andrew, Lecturer, Applied Linguistics)

## **2.3. Physio-temporal conditions**

Physio-temporal conditions afford and constrain the conceptualization of learning and teaching and the choice of learning mode in a particular setting. For example, courses with a small number of students in the small classroom were typically observed to have Interactive Lecture Mode as the main mode of learning and accommodate Voluntary Type peer interaction better than courses with a large number of students in the large seminar room. The following

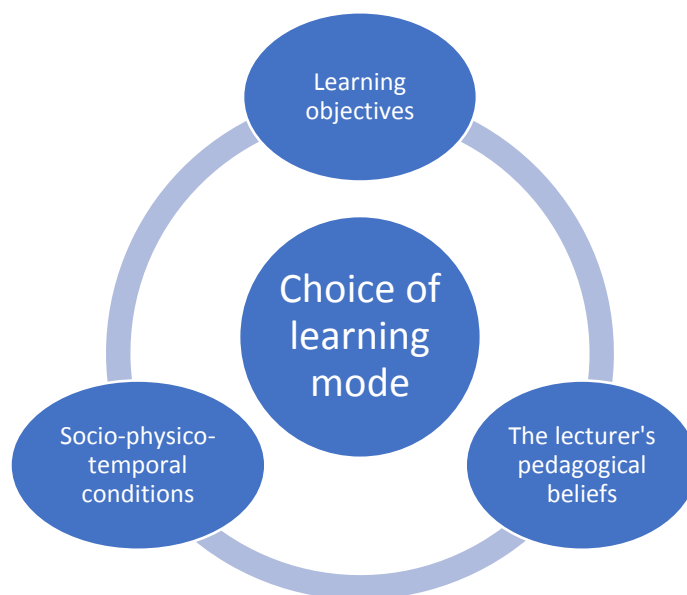
quote is an example of how physio-temporal conditions influence the choice of learning modes. An Engineering lecturer explains why he does not introduce a discussion to his large classroom:

Because of the size of the class, it's harder to get discussion going (Evan, Lecturer, Engineering)

## 2.4. Analytical framework of the lecturer's choice of learning mode.

The three general themes mentioned above will be utilized to constitute a framework of reference points (Figure 5.1) in making descriptions of how lecturers conceptualize learning and teaching and decide to choose different learning modes and accompanying interactional structures that were described in Chapter 4, Section 2. The constituent elements located in the outer circle of Figure 5.1 interconnect with one another to make impacts on the lecturer's choice of learning mode, such as Lecture, Interactive Lecture, and In-Class Task, in a given context and situation.

*Figure 5.1: Model of influential factors on the choice of learning modes*



In the following sections, this framework will be utilized to analyse the factors behind the choice of each learning mode and the recurrent themes will be referenced as parameters to organize each sub-section.

### **3. Motivations behind the choice of learning modes**

This section will address the lecturers' motivations for each of the learning modes and the accompanying interaction structure. How lecturers conceptualize their choice of learning mode will be explored, drawing upon the recurrent themes described in the previous section as an analytical framework.

In the following sub-sections, each learning mode will be discussed in terms of the lecturers' motivations to set up the learning mode. Four learning modes (Interactive Lecture, Presentation Task, In-Class Collaborative Task, Out-of-Class Collaborative Task. See Chapter 4, Section 2.) are highlighted here because of the focus on the lecturers' pedagogical use of peer interaction. Each learning mode is discussed in reference to (1) learning objectives, (2) the lecturer's pedagogical belief, and (3) physio-temporal conditions, which are components of the analytical framework (Figure 5.1).

The information on other learning modes, such as Lecture and In-Class Individual, are only briefly mentioned in this section because, although the learning modes set up conditions for types of students' voluntary peer interaction, these types of peer interaction were found not to be particularly intended by the lecturers.

#### **3.1. Lecturers' choice of Interactive Lecture Mode**

Interactive Lecture Mode is a condition for Voluntary Type peer interaction. If the lecturer and a student is interacting for some purposes, such as Q&A, and another student voluntarily joins in, peer interaction can start. Other students can also become the next speakers to extend the ongoing peer interaction further or choose to be listeners throughout the interaction.

This learning mode as well as the peer interaction type was commonly observed in Applied Linguistics and Engineering, where small class sizes were the norm, as the previous chapter showed. In the current data, the occurrence of Voluntary Type was limited to every 29.1 minutes in Applied Linguistics and once every 33.6 minutes in Engineering when the whole class was in Lecture and Interactive Lecture Modes (see Table 4.2: Disciplinary profiles of the occurrence of Voluntary Type peer interaction). In this sub-section, findings around how the lecturers set up Interactive Lecture Mode as conditions for Voluntary Type Peer Interaction are described.

### **3.1.1. Choice of Interactive Lecture due to learning objectives**

The theme of *learning objectives* emerged as motivations for lecturers to choose Interactive Lecture Mode in their postgraduate classes. Two sub-themes were found in the interview data to impact on whether the lecturer does or does not choose Interactive Learning Mode in the postgraduate course classroom. In this section, the two themes, namely, (1) *students' existent knowledge/skills and study level* and (2) *disciplinary essentials*, are detailed in relation to this learning mode.

#### *(1) Learning objectives determined by students' existent knowledge/skills and study level*

Postgraduate students' existent disciplinary knowledge/skill resources were found to impact on the decision making on learning objectives of particular postgraduate courses, which would in turn influence the choice of learning modes as conditions for interaction. In responses to the interviews as to whether there was any difference between undergraduate and postgraduate level pedagogies, lecturers from Engineering raised learning objectives as distinctively characteristic of study levels. One of them, Dylan, said he specifically set up the objective of his postgraduate course, as developing what he called "higher-level thinking skills", and he justified this decision on the basis of his students' existent disciplinary skills:

By this point they are all 400 level students. They have the basic skills ..... to make something. They can make it. What they really need to learn is how to think about different problems. What questions can you ask. Should you believe everything you read? What sort of research is out there? ..... It's trying to get them higher level thinking skills. (Dylan, Lecturer, Engineering)

Here the lecturer has assessed his *students' existent knowledge/skills and study level* and found them to be already equipped with enough resources to move on to different academic aspects required in his discipline. According to Dylan, this development is gained through particular sorts of educational material and format that would be appropriate for this level of students, which are research articles and discussion:

The title of this course is discussion on research topics. They read research papers and discuss them, which is less appropriate for 300 levels where they need to learn how to do things, as opposed to just discuss ideas. (Dylan, Lecturer, Engineering)

Thus Dylan chose classroom discussion or Interactive Lecture Mode as the right educational format where his students would discuss academic knowledge relevant to their existent resources and required level of learning. Similar learning objectives and materials use were identified by another lecturer from Engineering in his explanation that:

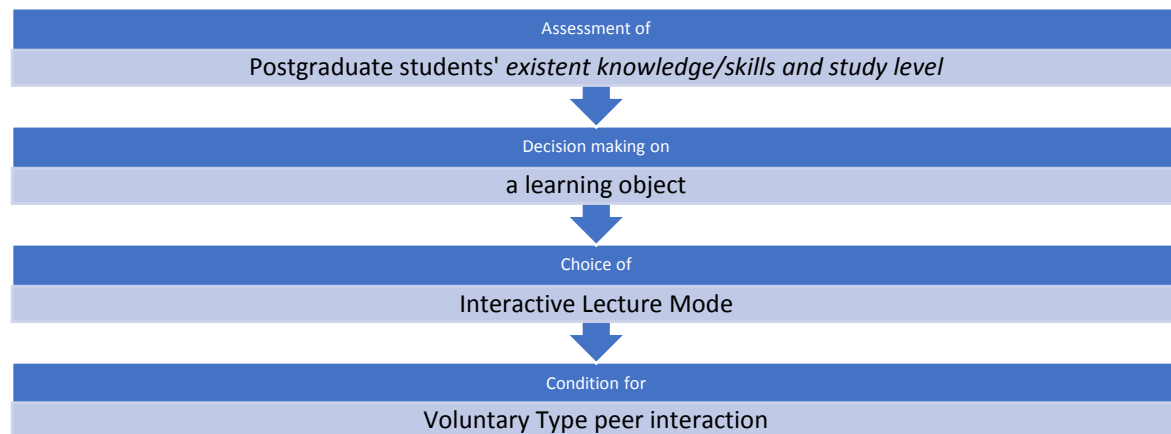
The requirement for the students (is) to read the 400 level paper and basically critique it in class and to demonstrate something. That is limited to my 400 level class. (Evan, Lecturer, Engineering)

Evan's use of "critique" and "demonstrate" in this quote seems to be roughly overlapping in their meanings with Dylan's use of "higher level thinking skills" and "discuss".

Dylan and Evan here share a clear emphasis that classroom interaction would mediate the development of higher cognitive skills required for students who have already acquired a certain level of academic knowledge and skills. The observations of their Engineering classes confirmed that learning in their postgraduate classrooms was carried out in a highly interactive structure and that Voluntary Type of peer interaction occurred six times for 330 seconds in total in Dylan's 50 minute class and three times for 75 seconds in total in Evan's 50 minute class. Figure 5.2 shows

how postgraduate students' existent resources and eligibility can impact on the lecturer's choice of Interactive Lecture Mode, which sets up the conditions for Voluntary Type peer interaction.

*Figure 5.2: A process of the lecturer's choice of Interactive Learning Mode based on the assessment of students' resources*



In Dylan's and Evan's cases, their assessment of the students' current personal knowledge/skill resources thus influenced their decision on higher cognitive skills as a learning objective, which in turn impacted on their choice of Interactive Lecture Mode as an optimal learning mode. The condition for Voluntary Type peer interaction was thus created by the lecturers' perceptions of learning objectives and pedagogical strategies.

Students' existent resources as the basis for interactive learning were referred to in other ways as well. One of the Applied Linguistics lecturers situationally assessed students' past work experiences and personal knowledge of different contexts to decide on learning modes. For example, this lecturer was observed to be interacting with his students actively throughout the class and strategically drawing on their personal resources by encouraging his students to share their relevant experiences and knowledge with other class members. As he said in his interview;

I deliberately yeah I do encourage people.... Sem is very competent. I like his perspective so definitely I like to hear what he has to say, but he doesn't always speak up .....

Amy's got great ideas but is much shyer so I got something, different reasons for asking

you, because I want to, her to have an opportunity to have her voice. (Ian, Lecturer, Applied Linguistics)

The observation analysis of this lecturer's class confirmed that this teacher quite often asked questions about the students' own past practices as language teachers and their contextual information in Interactive Lecture Mode. In this course, the students' personal resources were conceptualized to be pedagogically instrumental for all students to share. In other words, the postgraduate students' professional knowledge and experiences were conceptualized to relevantly serve the learning objectives of this course. This conceptualization naturally led to the choice of Interactive Lecture Mode, which facilitated the elicitation and sharing of the information the students personally had had.

An interesting finding about Ian's postgraduate class is that, although the observation confirmed that his class was highly interactive in Interactive Lecture Mode, which is the condition for Voluntary Type peer interaction, no occurrence was identified of this type of peer interaction in his class. Interaction was always found to occur between the lecturer and a student, or he set up In-Class Collaborative Task Mode, where his students themselves were supposed to talk among themselves. This finding confirms that, while Interactive Lecture Mode is the condition for the occurrence of Voluntary Type peer interaction, the learning mode does not necessarily entail its occurrence.

Another lecturer from Applied Linguistics, Brenda, explicitly conceptualizes the learning objective of an Applied Linguistics postgraduate program in relation to the postgraduate students' past professional experiences. She pointed out that this was a major difference between undergraduate and postgraduate courses in Applied Linguistics:

It's such an enormous difference between undergraduate level, where students kind of look on you to give them an answer to everything, and people who have actually had that experience, I mean, some uhm most of our MA students will have more than the two years of experience, aye. (Brenda, Lecturer, Applied Linguistics)

In her postgraduate course, these existent resources of her students' were conceptualized as connected to the target academic knowledge, and this connection would be made in the classroom through spoken interaction. As she says:

because the students come not only with theoretical [*unrecognizable*] they got from the readings but practical knowledge. You want a classroom to be an opportunity for them to, uhm, make links . . . ., any links that they haven't already made while they're actually reading, but actually talk about, uhm, theory and their own practice and to see what links they are or, uhm. (Brenda, Lecturer, Applied Linguistics)

Thus, in Brenda's postgraduate course, the learning objective related the postgraduate students' existent resources to academic knowledge, and this learning objective clearly impacted on the choice of Interactive Lecture Mode. In Interactive Lecture Mode, her students could share their past experiences and professional knowledge with other students in the classroom and thus made relevant links between their existent resources and the target academic knowledge. Under this condition, peer interaction opportunities were voluntarily created by students three times for 75 seconds in total, out of the 100 minute observation of Brenda's class.

Overall, classroom interaction as a preferred format in postgraduate courses in Engineering and Applied Linguistics was emphasized in relation to their established learning objectives, which were based on the assessment of their postgraduate students' existent resources. In Engineering, basic disciplinary knowledge and skills are taken for granted as foundations on which higher cognitive skills are to be built as necessities for some courses. In Applied Linguistics postgraduate courses, professional experiences and knowledge are the prerequisite for learning particular disciplinary knowledge for their academic and/or professional development. In both cases, though their natures might differ, Interactive Lecture Mode was chosen to serve the learning objectives which would suit their particular students with particular resources.

## *(2) Learning objectives determined by disciplinary essentials*

Besides the affinity to Interactive Lecture Mode in Engineering, it should be noted here that an element of the disciplinary nature of Engineering was also identified through some lecturer interview data to impact negatively on the choice of Interactive Lecture Mode. This element is likely to play out to limit the choice of Interactive Lecture and orient the learning



mode more towards Lecture. One of Engineering lecturers interestingly touched on how interaction *cannot* be the main format of learning in some of their courses. From his perspective, those courses require some time to address what they call “technical work”, which needs the lecturer to show the reconstruction of mathematical formulas to students. In the following quote, the lecturer, Cheng, compares the practice of Engineering with that of Applied Linguistics, which the current research interviewer belongs to.

I think that’s maybe relevant to culture, I would say technical culture. Because our technical questions would be different from your technical questions in your areas. You may not use whiteboard, you may have small class, you probably do the talking, group talking, without using whiteboard. But for us I think it’s almost impossible if you don’t use it any more, because we need to for example write down the formulas. (Cheng, Lecturer, Engineering)

When the lecturer in Engineering needs to transfer their advanced academic information drawing upon their mathematical or some technical knowledge and skills, a significant amount of time should be carved out of time available for this learning objective, and, according to Cheng, his disciplinary technical work is different from that in Applied Linguistics (as referred to “your areas” in the quote above) in that, from his perspective, mathematical manipulations are needed at some stage of their disciplinary education.

This reverse effect of disciplinary learning objectives on the implementation of spoken interaction in educational contexts is also shared by a lecturer from Finance in Business School, where Voluntary Type Peer Interaction was identified to be least in occurrence among the three disciplines. In the following quote, Sung, a lecturer from Finance in the Business School, is referring to one of his postgraduate courses (‘400’ level course) as requiring students to learn mathematical work:

400 paper, I think, requires them to understand the proof process. They don’t need to do the proof by themselves, but they need to understand the process step by step. Because this is very very important for the future research. If they want to extend the current literature, they need to know how to get the result rather than just knowing the result without proof, you know? (Sung, Lecturer, Finance, Business School)

It is obvious from these pieces of evidence that, in Engineering and Business School, some postgraduate studies are conceptualized to address the development of some levels of technical knowledge and skills. Lecturers in those disciplines believe that these essentials do not necessarily lend themselves very easily to the interactional format of classroom talk, especially when those knowledge and skills involve quite a bit of mathematical manipulation. This essential disciplinary knowledge as a learning objective thus motivates the lecturers in Engineering and Business School to choose Lecture Mode, not Interactive Lecture Mode, as the main instructional medium, in which information on technical knowledge and skills is transferred to students.

### **3.1.2. Choice of Interactive Lecture due to pedagogical belief**

Alongside *learning objectives* in the previous section, *lecturers' personal pedagogical beliefs* also impacted on the choice of Interactive Lecture Mode, as a component of the interpretative framework shown in Section 2.5. (see Figure 5.1). Under this category, two sub-themes emerged in relation to the lecturers' choice of Interactive Lecture; (1) *issues with Lecture Mode* and (2) *benefit of talking and interaction*.

#### *(1) Issues with Lecture Mode*

Tim, a lecturer from Engineering, pays attention to the way his students' concentration does not last long during Lecture Mode and posits that some sort of interaction is a solution to this problem:

If I go 10 to 15 minutes in the class without student interaction I think that's too long. I think most students concentrate for about 15 minutes. 20 minutes you lost them. Not a really good student can do 20 minutes with solid concentration and absorb new information. So what I tend to do is in a 45 – 50 minute lecture, after a 10 to 15 minutes

have something that allows them to re-absorb all the information I've given them and a discussion or an activity is a good way to do it. (Tim, Lecturer, Engineering)

In this quote, Tim shows how his belief in the benefit of interaction is not based on any learning objective for his course but purely on his personal pedagogical belief in interaction as having a complementary function to Lecture Mode. Obviously here he assumes that information transfer in Lecture Mode is essential part of his pedagogy but he believes that there is a weakness in Lecture Mode and that periodical interaction can address this weakness. In his interview, Tim implied as well that this personal pedagogical belief might be grounded in his personal experience in his university days when he says, "We didn't like those lecturers" who didn't have any interaction in their lectures after experiencing his secondary school with a lot of interaction in class. It might be reasonable to say that this sort of skepticism in Lecture Mode would, if partially, motivate the lecturer to develop his instructional style to introduce more interactive teaching and learning into his classroom, where there would naturally be all the more opportunities available for peer interaction.

## *(2) Benefits of talking and interaction*

Through the interviews with Applied Linguistics lecturers, a strong pedagogical belief emerged in benefits of students' talking and interaction as learning tools for development of knowledge. This belief seemed to have an impact on the lecturers' choice of learning modes. One lecturer explained the benefit of talking for forming ideas in the following way:

I think myself if I'm going to talk to somebody else about ideas I forgot, I always make much more strides even if it's talking to someone who doesn't actually know about it..... And then just talking to somebody and advancing your idea of it 'cause that actually makes you take sort of steps far for- forward that you might not have done if you're just thinking about it. (Brenda, Lecturer, Applied Linguistics)

Here she is emphasizing cognition as mediated by language use in social contexts, and she believes that talking works when 'just thinking' might not necessarily warrant the generation of

ideas. In this conceptualization of learning, the classroom becomes a venue that provides students with the very social context they need for the development of knowledge:

Uhm, but of course most of the time, you are doing on your own outside the classroom, so the classroom is sort of a place where gives you that opportunity to .....uhm, test what you think against other people. (Brenda, Lecturer, Applied Linguistics)

Thus the classroom is conceptualized in Brenda's pedagogical belief to serve the important function of complementing out-of-class individual learning for the development of students' knowledge and ideas.

This line of argument is shared by another lecturer from Applied Linguistics, who starts with the significance of active language use for learning:

I think practicing, uh, retrieving that information and producing something, is really important. (Hannah, Lecturer, Applied Linguistics)

Hannah then points out that talking in social settings has academically beneficial implications as a step towards better writing:

I think it's very important to have these group or pair activities so that they can learn to verbally express their thoughts in the way that gets what they want to say and what they are meaning across to another person, and the more they do that, the better at transferring into their writing skill as well, because they start paying attention to it and yeah what information needs go there. (Hannah, Lecturer, Applied Linguistics)

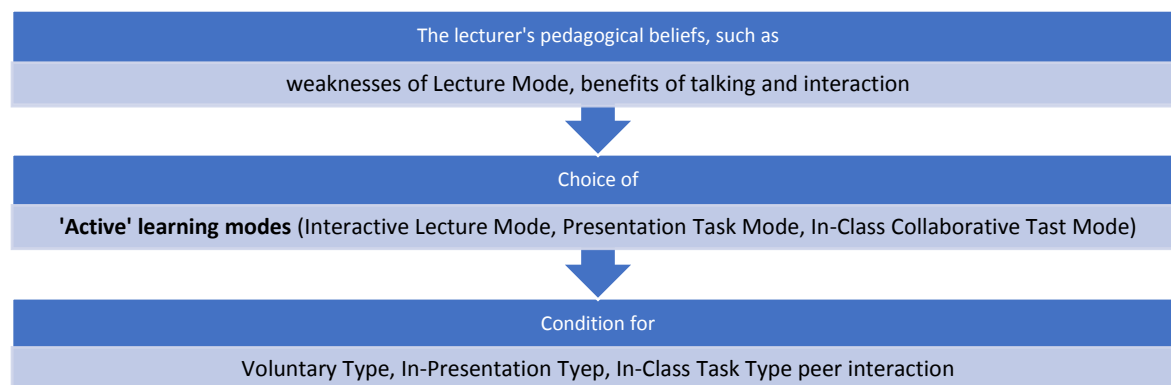
It is reasonable to infer that these beliefs in general benefits of talking will become motivations to set up learning modes in which some sorts of interaction are activated in class, rather than to focus on information transfer.

It should be worth noting that this attention to talking with pedagogical benefits come from Applied Linguistics lecturers alone in the interview data, not from Engineering or Business School lecturers. Applied Linguistics, in its disciplinary nature, involves paying attention to language in use as well as language teaching and learning, so it should be possible to reason that the lecturers in this discipline might have relatively keener awareness of the educational value of

talking than those in the other disciplines. This keen awareness might lead Applied Linguistics lecturers to set up interactive learning modes for the benefits of their students' learning.

It should be noted that the above-mentioned two sub-themes (*issues with Lecture Mode* and *benefits of talking and interaction*) as lecturers' pedagogical beliefs are likely to lead the lecturers to limit the choice of Lecture Mode as a 'passive' way of learning and to orient them towards 'active' learning modes. Although Interactive Lecture is one of those 'active' learning modes, other learning modes, such as Presentation Task Mode and In-Class Collaborative Task Mode, can be considered as active learning modes. In this sense, these two sub-themes should also become motivations for the choice of 'active' learning modes in general (Figure 5.3). To avoid the obvious repetition in the following sections, however, these sub-themes are only detailed in this section. The next section provides evidence of how physical conditions can influence the choice of Interactive Lecture Mode.

*Figure 5.3: A process of the lecturer's choice of 'Active' Learning Mode based on the lecturer's pedagogical beliefs*



### 3.1.3. Choice of Interactive lecture due to physio-temporal conditions

The influence of physical conditions on the choice of Interactive Lecture Mode emerged as a sub-theme of *physio-temporal conditions*, which was described in Section 2.4. As was noticed in the observations (see Chapter 4, Section 4.1. and 4.2.), the impacts of physical setting and class size were also important in the lecturers' conceptualization of their pedagogical

practices in postgraduate classes. There are a range of documentations around this identification. Kate, a lecturer from Applied Linguistics, after elaborating on how she liked a small physical setting for her postgraduate course, characterized her classroom practice in a general way as follows:

One thing that I use all the time is we always discuss altogether certain things. (Kate, Lecturer, Applied Linguistics)

Obviously, Kate is here specifying Interactive Lecture Mode as her main instructional format in her postgraduate course. This postgraduate practice was then contrasted to her relatively large undergraduate classroom, where the mono-directional interaction was typical enough that she views it as:

It's me talking and asking questions regularly. (Kate, Lecturer, Applied Linguistics)

Here Kate brings up Lecture Mode and Interactive Lecture Mode as her instruction format in her undergraduate course, but at the same time she implies that the nature of interaction in a large undergraduate classroom tends to be one-sided, with little possibility that students would take initiatives to actively create interaction opportunities. This lecturer-led type of Interactive Lecture in her undergraduate course is to be differentiated, in her conceptualization of classroom practices, from what she can set up in the small physical setting of her postgraduate course.

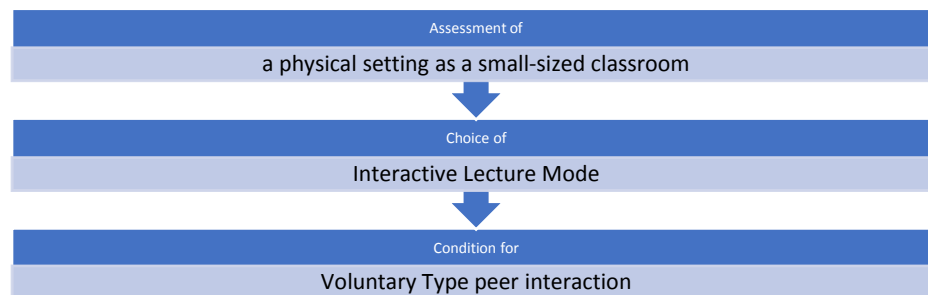
This theme of the affordances and constraints of Interactive Lecture Mode due to different physical environments between postgraduate and undergraduate was also found in the interview data from Engineering lecturers, who tend to have a much bigger gap than Applied Linguistics lecturers between the undergraduate and postgraduate levels in terms of class size. Evan, who has 150 undergraduate students in a large lecture theatre, mentions:

Because of the size of the class it's harder to get discussion going [at undergraduate level]. (Evan, Lecture, Engineering)

Another Engineering lecturer, Will, points out that interaction happens in the form of a whole class discussion in his 400 level postgraduate course and that "it happens naturally" in his then-current small classrooms with ten students.

From the evidence above, it can be concluded that some degree of affordance is highly likely available for the implementation of Interactive Lecture Mode in the small classroom settings. Lecturers in those environments can afford the interactive learning mode more easily than in large classroom settings, whether to address learning objectives they set up or to realize personal pedagogical beliefs they hold. This physical condition in turn occasions students' creation and utilization of peer interaction, in the form of Voluntary Type, which occurs in the middle of hierarchical interaction between the lecturer and a student when another student joins in (Figure 5.4).

*Figure 5.4: A process of the lecturer's choice of Interactive Learning Mode conditioned by the small physical settings*



In the interview data obtained from Business School, on the other hand, this attention to different physical settings that could impact on the choice of learning modes did not emerge. Observations confirmed that all the lecturer interviewees from the MPE, MAF, MBA programs in Business School had a relatively large seminar room or lecture theatre with a podium. Their main instructional formats were Lecture Mode and the type of Interactive Lecture Mode which was proactively initiated by their students' questions in the middle of Lecture Mode. In this discipline, each question was always observed to trigger hierarchical interaction between the lecturer and a student, never leading up to peer interaction among students in the observations as was the case in Applied Linguistics and Engineering. To put it differently, each discipline investigated has Interactive Lecture Mode incorporated into their classroom learning practices, but the nature of Interactive Lecture Mode showed distinctiveness in terms of the occurrence of Voluntary Type interaction between Applied Linguistics/Engineering and Business School,

which are different in physical settings. This contrast implies that, while physical settings have the potential to impact on the choice of learning modes on the side of the lecturer's conceptualization of learning/teaching, they also might influence the way students behave and negotiate their learning in the classroom environments. There is a possibility that, in smaller classrooms, students might feel more like joining in the ongoing conversation between the lecturer and their peer than they do in larger classrooms. In this way the difference in the occurrence of Voluntary Type seems to be a unique reference point in assessing the nature of Interactive Lecture Mode across different learning contexts.

### **3.1.4. Summary of lecturers' choice of Interactive Lecture Mode**

A range of variables were found to be involved in the lecturers' conceptualization and choice of Interactive Lecture as a learning mode for the postgraduate classroom learning. The conditions for Voluntary Type peer interaction also seem to be set up as a result of these identified variables. The variables or themes identified are (1) *postgraduate students' existent personal resources and disciplinary essentials*, both of which can impact on the lecturers' decision makings on *learning objectives* for particular postgraduate courses, (2) *weaknesses of Lecture Mode and benefits of talking and interaction*, which are parts of the lecturers' *pedagogical belief systems*, and (3) *external physical settings*. These multiple variables will act together, seemingly inextricably woven together to make conditions for the lecturers' choice of Interactive Lecture Mode in their classroom pedagogy, which could then afford the occurrence of Voluntary Type peer interaction.

Two points deserve attention regarding the choice of Interactive Lecture Mode by lecturers. Firstly, Interactive Lecture Mode does not rest solely upon the lecturers' pedagogical decision but also upon students' initiatives to set up optimal conditions for their own learning. Students are allowed to, and were actually observed to (as mentioned in the previous section), interrupt during the Lecture Mode and create Interactive Lecture Mode by asking questions or making comments at times when they feel they needed to do so. Detailed findings about students' initiatives to open up the Interactive Lecture Mode will be presented in the next chapter.



Secondly, no lecturers who frequently draw on Interactive Lecture Mode in their postgraduate classrooms referred in their interviews to occurrences of students' Voluntary Type peer interaction. Voluntary Type, by its definition in the current study, is contingent upon students' proactive initiatives to open up conversations with their peer in front of the lecturer and other students. While there is some possibility that this type of peer interaction might be unconsciously conceptualized by the lecturers' cognition to be happening naturally in Interactive Lecture Mode, no particular strategy was explicitly mentioned by any lecturer interviewee to prime its occurrence in this learning mode. In the next section, findings will be provided about the lecturers' choice of Presentation Task Mode, as a condition for In-Presentation Type peer interaction.

### **3.2. Lecturers' choice of Presentation Task Mode**

Following Interactive lecture Mode in the previous section, this section will provide findings as to lecturers' motivations for choosing Presentation Mode in their postgraduate teaching. Presentation Mode is one type of In-Class Task Mode, where an appointed student makes a presentation in relation to the target academic knowledge as a learning object. In this learning mode, there are usually opportunities for other students in the audience to interact with the student presenter for the development of understandings of the target knowledge, which constitute a type of peer interaction termed In-Presentation Type of peer interaction. Observations and interviews with lecturers and students identified two lecturer participants from Applied Linguistics and Business School respectively who incorporated the student presentation into their postgraduate educational practices, and one lecturer participant from Engineering who set up Presentation Task Mode as the main learning mode for his postgraduate course.

In the classroom observations, there occurred two consecutive segments of an Engineering postgraduate class where presentation activities were being carried out by postgraduate students. The first segment was held in the small-sized classroom, where two students made presentations on their assigned topics. The second segment was venued in a specially designed computer laboratory, where all of the six postgraduate students made presentations of their on-going engineering project, showing their products in progress on a large

monitor screen. The presentations were not structured to form the distinctive parts for presentation separated from Q&A time. In the middle of the presentations in both segments, students were freely asking questions of or sharing ideas with presenter students. These segments totaled 90 minutes.

The following sub-section addresses the identified motivations and justifications behind the choice of Presentation Task Mode, which affords students opportunities to interact among themselves to develop their own learning. *Learning objectives* as well as *the lecturer's pedagogical beliefs* were found in the current interview data as motivations that are linked to the setting up of this learning mode.

### **3.2.1. Choice of Presentation Task due to learning objectives**

Lecturers were found to choose Presentation Task Mode because of the *learning objectives* they set up for their particular postgraduate courses. As a sub-theme, *future relevance* (see Section 2.1.3.) emerged as a motivation for lecturers to decide on learning objectives of their courses. Sung, a lecturer in charge of finance related courses in Business School, implied that his Honours course was oriented towards academic research and that his students were expected to develop knowledge and skills essential for their future academic situations through Presentation Task Mode:

Students are required to do the individual presentations. For example, they need to get some, one paper and they went to read the paper and they need to present the main ideas of the paper, for example, what's the motivation of this research, what's the data they use, what's the methodology, and what's the conclusions. And do you have some critical comments we call critical thinking, you know. Do you think it's a good paper or bad paper? Or do you have anything you can improve in that paper? ..... And they are also required to do individual work by submitting the research, small research project. (Sung, Lecturer, Finance, Business School)

Sung's students are supposed to summarize academic paper as they addresses each component of the research paper genre and critique it for their own project. Here, Sung's description of the

required learning activities has strong connotation of this course's nature being oriented towards academic research. With this target situation in mind, Sung chose Presentation Mode as conditions for his students to develop higher cognitive skills including what he calls "critical thinking" as a seeming learning objective. Given that making a presentation is an essential part of academic life, the choice of this learning mode might be interpreted to be a form of the initiation of postgraduate students into academic research community.

### **3.2.2. Choice of Presentation Task due to pedagogical beliefs**

Ben, a lecturer from Engineering, was found to put students' presentations in the core of their classroom learnings. Each class was supposed to have one or two student presentations based on assigned readings and this presentation activity functioned as what was equivalent to Lecture Mode as it is usually practiced in most postgraduate courses. While receiving the target academic knowledge from their peer presenter, the students were actively making comments and asking questions during and after their peers' presentations. The lecturer was generally playing a role of being an observer with the least intervention. In the interview, he elaborated on his own involvement in this learning mode, touching on how he could promote peer interaction in this format:

And so one thing that would happen is, those students would present with slides, for example, the things they do understand, and then, though, bring up the paper here to paper and though, though, uhm, say, "Ok what's going on here? I didn't understand this part." And they will discuss that in class and I always I first see, you know, I let other students answer first, because maybe that person didn't understand that but this person did..... And then sometimes I, I say what I think. (Ben, Lecturer, Engineering)

Ben explains here the way he is strategically utilizing his students' initiatives to help solve a comprehension problem among themselves. Rather than intervene immediately, he waits and sees how students can manage their problems in a collaborative way. When asked in the interview if he would intentionally minimize his impact on students' conversations, he answered affirmatively. Also, he was found to be fully aware of the nature of his pedagogical style as

being far removed from what was thought to be common in other classrooms. This distinctive nature of his educational style was, it was found, rooted in his strong belief that students' active involvement in their own learning would benefit them greatly:

When somebody learns something, the most important thing is to understand that, you know this already, when somebody learns something, they learn it. It's not the teacher gives it to them. They learn it. (Ben, Lecturer, Engineering)

Claiming himself, "I'm very much a fan of self-directed thing", he explained that he has the Psychology major for his undergraduate study, and that he had investigated into Psychology research field and found inefficiency of the traditional lecturing style as well as deeper engagement when fewer materials and more involvement are given to students. This solid conceptualization of learning and teaching led him to believe that the postgraduate classroom learning should centre around students' presentation as its core activity. Under this belief system, Ben optimized conditions for students to interact among themselves as much as possible by refraining from redundancy in his educational intervention.

Ben's practice of giving students presentation activities as the core of learning in his course was also corroborated by his assessment of students' capacity of this learning. He expressed his positive view about his students' adequate management of presentations:

I myself also prepare the topic and if there is something that they didn't cover I will comment on it. I have found usually I don't need to do any slides even. At the beginning I would also do my own slides but now I don't use my slides. I just, if there is something they miss, I do a little bit of whiteboard, uhm, but, yeah, usually they're quite good. (Ben, Lecturer, Engineering)

This confidence in students' existent resources for self-management of the learning activity seems to help maximize peer interaction opportunities to their full extent. This case represents a clear piece of evidence that shows how greatly teachers' pedagogical styles can impact on interactional settings in the classroom learning.

Contrary to Ben's positive view, interestingly, there were lecturers who extended their concern about the use of Presentation Mode as a pedagogical tool. They emphasized the affective and cognitive loads of presentations for their students. For example, Ian from Applied

Linguistics doubted that this type of task would be effective for his students, when he said, “I don’t think other students really like it too much.” According to his pedagogical experiences, students are sometimes seen “doing half-baked things” in their presentations, which “feels a waste of time” to him. Another lecturer from Applied Linguistics also expresses his dissatisfaction as to what his students showed in their presentation tasks. He found “it was so disastrous”. Although he admitted the possibility of its effectiveness for certain people, he pointed out that it is:

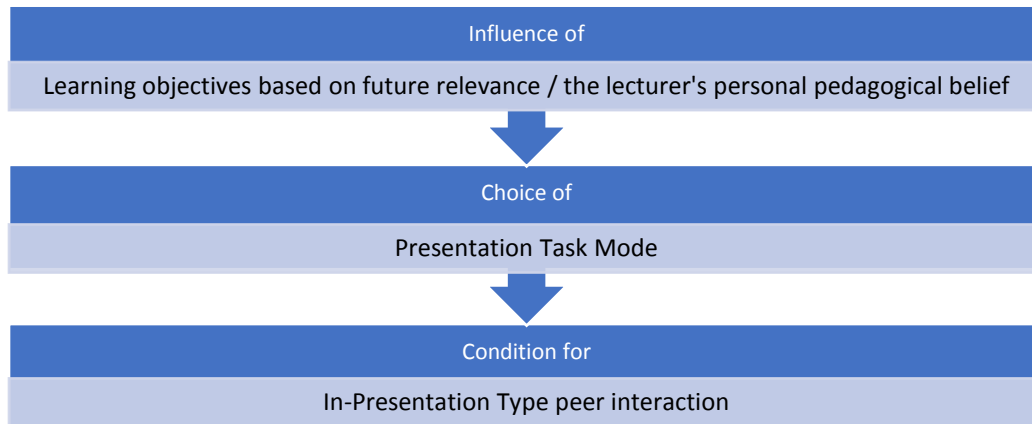
Excellent if it works, but it doesn't work, it can be disastrous. They introduced a wrong idea, wrong conceptualization to the whole class, and the teacher would find it so hard to point to the student “on this part you are wrong.” (Andrew, Lecturer, Applied Linguistics)

These mixed feelings identified across lecturers suggests that a success in this type of task requires the adequate matching between the task nature and students’ existing resources. Peer interaction opportunities in Presentation Task Mode are thus afforded or constrained by this perceived congruence or incongruence.

### **3.2.3. Summary of lecturers’ choice of Presentation Task Mode**

In the interviews with lecturers across disciplines, two factors were identified as variables that could influence the choice of Presentation Task as a learning mode in the postgraduate classroom (Figure 5.5). The first one was *future relevance*; making a presentation is conceptualized to be a relevant skill to academic research as an envisaged future situation. The second one was *lecturers’ pedagogical beliefs* as to educational benefits of the presentation task. While this learning mode is expected to heighten students’ engagement to full extent and optimize collaborative learning greatly, its sheer cognitive load regarding understanding and delivering the intended contents were also taken by some lecturers to involve a risk. In this sense, Presentation Task and its accompanying peer interaction opportunities will be limited in their implementations and realizations. The next section will address a learning mode involving collaborative tasks in the classroom.

*Figure 5.5: A process of the lecturer's choice of Presentation Task Mode*



### **3.3. Lecturers' choice of In-Class Collaborative Task Mode**

In-Class Collaborative Task Mode is a learning mode in the classroom in which students are supposed to engage in a task given by the lecturer, such as a pair/group discussion or exercise. As shown in the previous chapter (Chapter 4, Section 4.3.), this learning mode occurred very differently among the investigated three disciplines. It occurred quite frequently in Applied Linguistics across all the classes observed, totalling fourteen different collaborative tasks and 150.5 minutes out of 500 minutes, while in Business School it just occurred in one out of the five classes, totalling five tasks and 25 out of 1030 minutes observed. In Engineering, no collaborative task was identified in the classrooms observed. Interview data confirmed that students and lecturers in Business School and Engineering did not find this learning mode to occur frequently.

This learning mode entails In-Class Task Type peer interaction, which occurs when the lecturer gives a specific direction for students to engage in some sort of activity in a collaborative way, typically in pairs or groups. This section provides evidence from the lecturer interview data to help understand how the lecturers set up conditions for this type of peer interaction by giving their students collaborative learning tasks. All the themes in the analytical framework (Section

2.5.), which include *learning objectives*, *lecturers' personal pedagogical beliefs*, and *physio-temporal conditions*, were involved in the choice of this learning mode.

### **3.3.1. Choice of In-Class Collaborative Task due to learning objectives**

The lecturers were found to choose In-Class Collaborative Task on the basis of learning objectives of particular postgraduate courses they were in charge of. *Students' existent knowledge/skills and study level*, *disciplinary essentials*, and *future relevance* were identified as factors behind the lecturers' set-up of learning objectives that would then condition their choice of collaborative tasks in the classroom.

#### **3.3.1.1. In-Class Collaborative Task due to students' existent knowledge/skills and study level**

A lecturer from Applied Linguistics linked learning objectives of his course to the postgraduate study level. In the context of referring to its contrast to his undergraduate classroom, Ian characterized what he expected the students to do in his postgraduate classroom as follows:

I expect people to be pretty much on top of the content. And I want to get them to explore it, play with it, manipulate it, and apply it and all sort of things. I'm not there to deliver content so much..... They need to be responding critically to reading, applying it, thinking about it, arguing your point of view, having a position, having an opinion. (Ian, Lecturer, Applied Linguistics)

The different cognitive activities brought up here can be captured as students' active use of higher-order cognitive processes. In Ian's conceptualization of postgraduate classroom learning, the reception and acquisition of content knowledge, namely, the lower side of cognitive processes, is backgrounded. In observations, Ian was found to give more collaborative tasks (6 different tasks in 100 minutes) than other Applied Linguistics lecturers (2 on average in 100 minutes). Given this sheer frequency, it is possible to infer a strong relation between the learning objectives he conceptualized and the choice of In-Class Collaborative Task as a learning mode.

He might have tried to realize his conceptualization by engaging his students in different tasks for a range of higher cognitive processes he believed to be beneficial for postgraduate studies.

### 3.3.1.2. In-Class Collaborative Task due to disciplinary essentials

What is perceived to be a disciplinarily essential learning objective of a particular postgraduate course was found to be either advantage or hindrance in the lecturers' choice of collaborative tasks in the classroom.

#### *(a) Disciplinary essentials affording the choice of In-Class Collaborative Task*

Some disciplinary nature was also found to be an influence on the choice of In-Class Collaborative Task Mode in the postgraduate context. Asked about possible differences among postgraduate courses in terms of activity type, Hannah from Applied Linguistics exemplified her two courses (AX53 and AX42) as having different natures:

Because, uhm, well, AX53 is more content focused whereas AX42 is more skills focused, so, uhm, the activities I bring in for AX42 are more focused on skill development, so developing the critical thinking skills, uhm, for the different methods. (Hannah, Lecturer, Applied Linguistics)

In the interview, she characterized the activities for skill development as “practice”, saying “they get a bit of practice with that”. This practice was identified to be carried out in the form of small group discussions in her class. Thus Collaborative Task Mode was chosen by Hannah as an optimal learning mode for students to learn essentials of this course.

The same theme of content versus skill was emergent in the interview with another Applied Linguistics lecturer. In the following quote, this Applied Linguistics lecturer talked about the necessity of providing her students with actual opportunities to develop a disciplinary skill in the course named Analytical Method, though here “skill” was not consciously conceptualized as such:



And half would be doing some tasks. Yeah, or a third may be doing tasks..... Uhm, I think especially for Analytical Method, you want to get students opportunities to, uhm, do, actually do the discourse analysis. (Brenda, Lecturer, Applied Linguistics)

While Brenda believed the course nature of Analytical Method requires students to actually engage in the analysis task in class, she also recognizes that compatibility around the introduction of tasks varies depending on the disciplinary nature of a course. In her conceptualization, this variation was explained in terms of the distinction between “content” versus “methodologies”, which can be interpreted as equivalent to content versus skill in course nature:

Analytical Method is an easier course to allow students to, I mean, because that the whole deal is that you’re teaching people methodologies of analysis and so it lends itself to that kind of pair work, while, uhm, in something that more, uhm, content based almost, like I used to teach ..... it’s much more content based and so it’s harder to, uhm, find tasks for students to. (Brenda, Lecturer, Applied Linguistics)

In this conceptualization of skill- or methodology-orientation as a course nature, the Applied Linguistics lecturers were incorporating In-Class Collaborative Task Mode into their practices. Granted, however, that some courses would have an affinity to this learning mode as perceived by Brenda, that does not necessarily entail having to choose Collaborative Task Mode instead of, for example, Individual Task Mode. There must be an additional motivation from a holistic view to explain the Applied Linguistics lecturers’ choice of this particular learning mode. One likely possibility is that, as detailed in Section 3.1.2.2., their pedagogical beliefs in educational benefits of talking and interaction led them to choose Collaborative Task Mode instead of other modes for their students to do some exercises of the target disciplinary skills in the classroom. In their conceptualization of learning, doing exercises collaboratively might be more beneficial than doing the same activities individually.

*(b) Disciplinary essentials constraining the choice of In-Class Collaborative Task*

Disciplinary essentials were also conceptualized to be a hindrance for the choice of Collaborative Task Mode in some disciplines. Sung and Luke, two lecturer interviewees from Finance in Business School, when asked, denied any possibility of the introduction of collaborative task in their Finance classrooms in relation to their disciplinary learning objectives:

I don't think there's any group work going on here, based on my knowledge. I think in my memory there's no one who use group work. I think this is because of difference of discipline, you know..... I don't think there is any group work. Most of them are individual work. .... this one, most of the time, you know, use the computer and then all data available in there you just analyse by yourself..... (Sung, Lecturer, Finance, Business School)

So for this course, I think, ..... it's not much of a possibility for, I didn't think it would have a big contribution to do over all learning, but I think for other courses there's definitely a place where you have six to eight students or where you have twenty students forty fifty students ..... there is some good, there, there is some value at having that group work. (Luke, Lecturer, Finance, Business School)

Here they share the conceptualization of a collaborative task as not having its place in their disciplinary teaching. One of the lecturers, Sung, attributes this perceived incongruence to the disciplinary nature of Finance as what he describes as “individual work”. He also characterizes the sort of technical process involved in the individual work as computational analysis. This characterization of the core skill of his discipline by himself is quite informative when it is juxtaposed with Brenda's conceptualization of learning activities for her discipline, Discourse Analysis, in Applied Linguistics. Although both Sung and Brenda deal with what can be called analysis as their disciplinary skill, Sung's course does not have any affinity to peer work while Brenda does, according to their conceptions. This suggests that complex mathematical calculation necessitating the use of a computer might be a dividing element between the two disciplines in terms of an affinity of collaborative work to their educational practices.

### 3.3.1.3. In-Class Collaborative Task due to Future relevance

This theme was identified as a justification of the introduction of In-Class Collaborative Task Mode in the MBA program from Business School. Jackson, an MBA lecturer, emphasizes that his disciplinary knowledge should be learned in consideration of how it is used in the real world situation;

There is a theory in management, but it is fundamentally an applied subject. The manager is out there, they are collaborating, they are talking..... so it is difficult for them not to be collaborative. In the real world ..... can he or she be without collaboration? They simply cannot. (Jackson, Lecturer, MBA, Business School)

Although Jackson was the only lecturer who used Collaborative Task Mode in Business School in the observation, this conceptualization of the nature of MBA educational program was found to be shared broadly among lecturers in charge and students as well. A question here is then why there is a difference between Jackson and other two lecturer participants from MBA program in terms of the use of collaborative tasks in the classroom contexts. This raised question suggests again that there is a strong possibility that the choice of a learning mode should not be explained in a single justification or motivation but viewed in a dynamic picture with various factors playing out together and complicating relative influences of each variable.

Another important finding of this theme is that, when some disciplinary knowledge and skills are valued and learned in an educational context, attention is actually paid to the context of the use of the knowledge and skills in question. This consideration will help understand the nature of postgraduate education in general as well. We are seeing this theme emerging again as a strong justification behind the choice of another collaborative task, namely, Out-of-Class Collaborative Task Mode as well, which will be described later in the next section (Section 3.4.).

### 3.3.2. Choice of In-Class Collaborative Task due to pedagogical belief

For some lecturers, classroom collaborative tasks and peer interaction work positively for their intended approach to learning. From this pedagogical perspective, students are expected to

get actively involved in the construction of their academic knowledge/skills on their own. In the interview data, two sub-categories were identified under the lecturer's personal pedagogical belief in relation to the choice of In-Class Collaborative Task Mode. The beliefs are in *students' accumulated resources* and *affective support in collaborative learning*.

### 3.3.2.1. In-Class Collaborative Task due to Students' accumulated resources

Tim, a lecturer from Engineering found strong benefits in peer talk and strategically utilized its positive effects, seemingly irrespective of any disciplinary or study-level contexts. He shared the procedure of incorporating collaborative learning into his pedagogical strategy (for which there was no opportunity to be observed in the current investigation) for guiding his students to solve problems collaboratively. In this procedure, the first step is to form an idea individually and develop it in a talk with peers. As he said in his interview:

Go think about it yourself first. Discuss it amongst yourselves, then so turn to a person that sits next to you, and verbalize what you are thinking. Because if you can't explain what you are thinking then you don't really understand it. (Tim, Lecturer, Engineering)

In the second step, each developed idea collectively contributes to problem solutions in the modes of a pair/group discussion and finally a whole class discussion. In the interview, Tim elaborated on this collaborative problem solution as containing a range of communicative elements, which include disagreements and compromises, and he was positive about students' products thus generated. He expressed his belief in students' own learning resources and skills when he said;

Nine times out of ten, the whole class get together and sort of wisdom of crowds permeates and they get the right answer. (Tim, Lecturer, Engineering)

The choice of Collaborative Task Mode is thus backed up by his personal pedagogical belief in students' accumulated resources.

### 3.3.2.2. In-Class Collaborative Task due to Affective support in collaborative learning

Lecturers shared their awareness of students' affective barrier when talking to a whole class. As to disadvantages of Interactive Lecture Mode, Ian touched on the lecturer-fronted interaction structure as a possible hindrance to some students' communication:

Even though nine is not a big class, there's still something about the act of presenting information to the whole circle with me arbitrating, mediating. It's just a little bit more formal and a little bit more intimidating for some. (Ian, Lecturer, Applied Linguistics)

In Ian's belief, In-Class Collaborative Task Mode is justifiable because of the learning mode being free from this perceived caveat of Interactive Lecture Mode. In collaborative tasks, in this conceptualization, students are given less threatening learning environments, and peer interaction opportunities thus created become a learning space that involves students in their active presentation of their relevant domain knowledge.

### 3.3.3. Choice of In-Class Collaborative Task due to physio-temporal conditions

As in the findings on Interactive Lecture Mode, physical conditions had an impact on the feasibility of In-Class Collaborative Task Mode in postgraduate classrooms, though in the opposite way. Lecturers shared their reasons why they *did not* choose Collaborative Task Mode under their current physical configurations. For instance, Cheng from Engineering states that it is unnecessary to introduce a pair/group talk into his classroom because of class size:

But here ..... the main reason for me is, that class, it's very small. If you make a group, it's almost one group or two group. (Cheng, Lecturer, Engineering)

He contrasted his educational practice in his postgraduate courses to that in his undergraduate courses. He said he tended to give students collaborative tasks in his undergraduate courses, where he had a larger population of students in much bigger physical settings:

I think, for the larger class, we had the group discussion and in general, I give them a research-, uhm not research task but task or problem. And like their group is to find a solution by it. I think that's the normal thing we do. (Cheng, Lecturer, Engineering)

By “the normal thing we do”, he suggests that this use of collaborative tasks is a common practice for large classroom contexts in his discipline. Classroom size as physical settings afford and constrain In-Class Collaborative Task Mode, in his conceptualization of learning/teaching.

Physical settings also involve equipment, it was found from the Business School data. Sung from Finance, Business School, explains one of the reasons why he does not think it is feasible to introduce collaborative learning into his classroom:

Of course the other thing is, I think, we need some kind of resources if we want to do group work or team work, for example, 'cause we need some lab, experimental lab. (Sung, Lecturer, Finance, Business School)

Sung then went on to talk about an idea that some physical settings with shared large monitor screens showing different figures or tables of financial market data might enable students to discuss learning material in Collaborative Task Mode. In the same vein, Evan, from Engineering, raised a need for movable desks and chairs as a condition for in-class collaborative, work such as designing a user interface software in a group. The ordinary classroom setting does not accommodate this type of engineering task, according to this lecturer. These conceptualizations of collaborative learning in relation to particular physical settings suggests that the nature of some disciplinary activities does not necessarily match with what learning activity the classroom is originally designed for.

As for the impact of the temporal aspect of classroom learning, an interesting finding was documented with a lecturer who utilized In-Class Collaborative Task Mode quite often:

For two hour class, yes, but if there is time constraint, priority should be on content delivery with shorter discussion. (Ian, Lecturer, Applied Linguistics)

In Ian's conceptualization of his educational practice, information transition was found to be prioritized to talks within given time constraints. This belief of his is impressive when it is

remembered that he had the strong sentiment against the one-directional information delivery when he said:

I'd love to, I keep on wanting to change it. I'm not happy with being information-focused in lectures. (Ian, Lecturer, Applied Linguistics)

Then his decision makings can be understood not to be unproblematic. The following statement uncovers more clearly that his pedagogical decision involves two different motivations conflicting with each other:

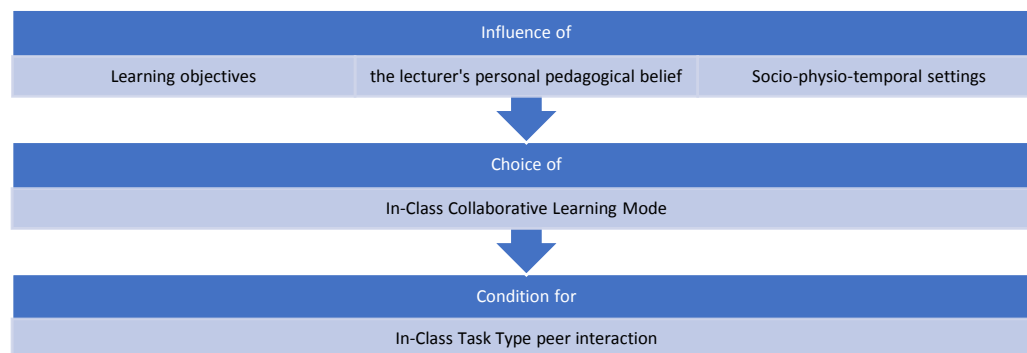
So I do a lot of interactive stuff but it really messes up my time, which is why I say I am still struggling to think, how the hell do I develop... how the hell do I deliver an engaging learning experience and get through the content that I set for the course. And that's the challenge. (Ian, Lecturer, Applied Linguistics)

This conflict in his decision makings on choices between Lecture Mode and other modes is suggestive of his pedagogical conceptualization that students' receiving academic information should be prioritized while he believes their learning experiences should be expanded as much by any pedagogical device, including collaborative tasks, as contextual conditions allow. This is one example of different factors playing out in a complicated way for the lecturer's choice of learning modes in a particular context.

### **3.3.4. Summary of lecturers' choice of In-Class Collaborative Task Mode**

The analysis of lecturer interviews identified a range of factors that can motivate lecturers to choose In-Class Collaborative Task Mode. Postgraduate learning objectives, disciplinary affinity to collaborative tasks, real-world relevance, physical and temporal settings, and the lecturer's personal pedagogical beliefs were identified to be involved, often intricately interwoven, behind the conceptualization of a postgraduate classroom as a venue where students will collaboratively engage in learning activities. Students' peer interaction opportunities are thus afforded and constrained by the lecturer's conceptualization of use of collaborative tasks (Figure 5.6).

*Figure 5.6: A process of the lecturer's choice of In-Class Collaborative Task Mode*



The next section will address what motivates lecturers for Out-of-Class Collaborative Task Mode, in which students work together to do tasks outside of the classroom.

### **3.4. Lecturers' choice of Out-of-Class Collaborative Task Mode**

Postgraduate students across disciplines were given group work outside the classroom, typically as assignment work. Technically any interaction that could occur in this learning mode is supposed to be among peers except when students contact the lecturers for some sort of feedback or advice on issues they encounter during the group work, and this type of peer interaction is termed Out-of-Class Task type peer interaction.

In the current investigation, the distribution of occurrences of this learning mode was found to be uneven across disciplines. In Applied Linguistics, generally, most of the courses do not particularly require students to engage in this learning mode, and there was only one lecture identified to give students out-of-class collaborative work. In Engineering, there were many courses across study levels which require students to work collaboratively outside the classroom, and at postgraduate courses investigated, two out of six lecturers assigned out-of-class group work to their students. Lastly, in Business School, there was not so much of this learning mode identified in the MPE and MAF programs, while it was institutionally incorporated into the MBA program and most of the courses require students to do collaborative task outside of the



classroom. This section provide factors that were found to be working behind this difference across disciplinary practices.

### **3.4.1. Choice of Out-of-Class Collaborative Task due to learning objectives**

Lecturers chose Out-of-Class Collaborative Task Mode, based on the learning objectives of their courses which reflect the relevance of the disciplinary learning to students' future workplace situation. This pedagogical focus was identified to be shared among lecturers in MBA in Business School and Engineering for the development of social skills necessary in workplace situations. In these disciplines, disciplinary education is constructed to address the real-world social situation in terms of the way disciplinary knowledge and skills are actually used. Out-of-Class Collaborative Work was found to be chosen to serve this learning objective. The principle behind this choice was to conceptualize collaboration or team work as an essential element of the real-world work environments and simulate the social structure in the form of learning activities. In the following quote, Oliver, from Business School, is relating how students are required to experience working in a team in educational contexts:

For me that's important. Because you need to go to, to work with other people, selfish people won't be able to work with other people and then you will be a loser. So we need to, only by working with other people, you can appreciate the fruit of team work. So I think that's important. (Oliver, Lecturer, Finance, Business School)

Oliver here highlights the importance of team work in the real world work situation and emphasizes the educational value of collaborative learning activities. Obviously this view does not stem directly from the particular nature of the disciplinary knowledge and skills in themselves but rather from the lecturer's personal perception of a success in authentic work contexts.

Another lecturer from Business School specifies the nature of authentic activities in the context of business management as follows:

The manager is out there, they are collaborating, they are talking....there all the time, isn't it? So it is difficult for them not to be collaborative. In the real world.....you think

about the manager who's managing.....I don't know, BNZ out there. Can he or she be without collaboration? They simply cannot. (Jackson, Lecturer, Management, Business School)

This line of justification for setting up group work as a learning mode is shared across disciplines. A lecturer from Engineering also emphasizes the necessity of preparing his students for the social structures in their future workplace situations, in the "safe" educational environments where they can have less stress engaging in the preparation:

Fundamentally, it's a required part of any engineering program. Even before we were a professionally accredited engineering program, the thing is that, computer scientists, software engineers, network engineers, the kind of students we uplift from the school, they're gonna go down to get jobs in group based industry. There few software developers work by themselves. They often work in, with a team..... So one of the things that we really think is valuable for our students is to get experience working with other people in a relatively safe environment..... It's an important skill to work collaboratively with people. (Evan, Lecturer, Engineering)

Another lecturer in the same discipline had a different perspective and pointed out the interdisciplinary nature of his field as being representative of the real-world situation where collaboration and communication would be needed among people from different fields:

Mechatronics is defined as an intersection between computer programing, mechanical engineering, controlling design. And therefore it makes (sense) to collaborate together that mechatronics is a collaborative subject whereas something maybe like signal processing isn't necessarily a collaborative process. If you're a mechatronics engineer, you would be expecting to be at interface with other people. You would expect to work with computer programmers, mechanical engineers, designers, so the ability to talk and the ability to communicate ideas is central to what mechatronics is about. (Tim, Lecturer, Engineering)

All the evidence shown above suggests that education in the MBA program and Engineering is generally sensitive to students' future activities in the real-world work environments and that this sensitivity leads lecturers to choose Out-of-Class Collaborative Work, in which postgraduate students are expected to engage in peer interaction to develop social skills deemed necessary for their future situations. The next section will provide evidence of how different motivations are combined to choose Out-of-Class Collaborative Task Mode.

### **3.4.2. Choice of Out-of-Class Collaborative Task due to interwoven factors**

As mentioned as to the choices of Interactive Lecture Mode and In-Class Collaborative Task Mode, the identified multiple influential factors are often intricately intertwined to impact on lecturers' choice of a learning mode. As for Out-of-Class Collaborative Task Mode, there was found to be one unique case where multiple variables were working together to contribute to the choice of group work outside of the classroom as a learning activity. Some disciplinary knowledge and skills were captured as being necessarily complex and large in their structures and scopes, in consideration of their usefulness in the target situation. A postgraduate course can focus on the production of those complicated body of artefacts as its learning objectives. In that case, the implementation of that sort of education within a given temporal constraint, for example, within one trimester of the university calendar, might not be feasible in the format of a student's individual project. Team work, then, would function as a reasonable solution to this dilemma. Some out-of-class peer work was justified in this line of argument. Evan, an Engineering lecture, shared this conceptualization of the disciplinary learning in the following ways;

15-point courses have, only have 150 hours of work during a trimester. Within this time constraints, a single student cannot attain a complex enough project but a group of students can do a much bigger and complex project. A lot of the things we teach only really become useful at certain level of complexity. A lot of design strategies, the tools for use..... (Evan, Lecture, Engineering)

Here Evan touched on a range of aspects around setting up learning objectives, including time constraints, disciplinary essentials, and target situation relevance. This evidence clearly shows how different variables will interplay in the lecturer's choice of Out-of-Class Collaborative Work Mode.

Another engineering lecturer, Dylan, referred to the same influential factors in the opposite way when he mentioned why he did not assign his students to out-of-class collaborative work;

We are doing something that's very easy to do. So the actual, the actual programming skills involved and the amount of code you have to write, which is sort of measure of what you need to produce, is not very large. And so the complexity in terms of how many people you need to do is actually very low. (Dylan, Lecturer, Engineering)

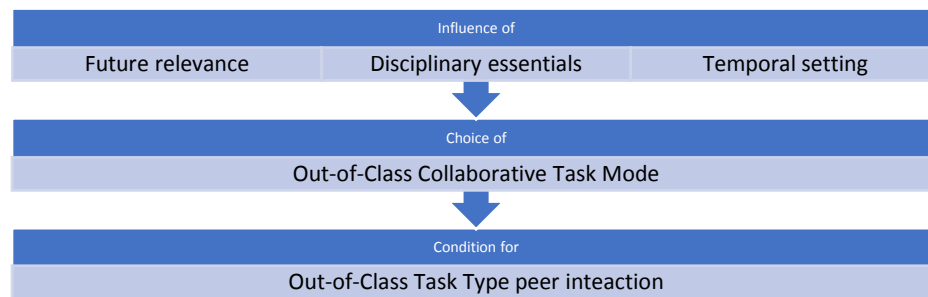
Given the two lecturers were both in charge of software engineering courses, those two pieces of evidence shows that in some parts of Engineering, disciplinary knowledge and skills are, and need to be, conceptualized in terms of varying complexity and that their flexible ranges can in turn allow different educational foci and then accommodate the setting of different learning objectives. While Evan's course focused on (arguably technical) knowledge and skills in the implementation of complicated engineering work, Dylan's course had a different angle at its learning in the sense that it was aimed to develop critical thinking skills for engineers rather than engineering knowledge and skills in themselves. In the latter, its learning objective thus required much less complex disciplinary knowledge and skills as its materials than the former so that it should not be confounded by extra work loads, and then naturally it took on the format of learning which would not need team work outside of his classroom.

### **3.4.3. Summary of Out-of-Class Task Type Peer Interaction**

Although a range of motivational factors were found to be involved and often intertwined in the provision of group work to be done outside the classroom (Figure 5.7), in the current data, a major influence was identified of activities in students' future situations. This finding might suggest that education in each of the disciplines currently investigated, especially Business

School and Engineering, has orientation towards use of academic knowledge and skills in the real world contexts, and that the out-of-class group tasks or assignments in their educational contexts might represent this disciplinary nature.

*Figure 5.7: A process of the lecturer's choice of Out-of-Class Collaborative Task Mode*



The next section will briefly address lecturers' motivations behind the choice of Lecture Mode and Individual Task Mode..

### **3.5. Lectures' choice of Lecture Mode and Individual Task Mode**

Lecture Mode was found to be almost universal across the three disciplines and courses investigated, and only one exception was an Engineering course where students take turns making presentations of assigned academic knowledge. In this course, the lecturer did not lecture but gave feedback to students' presentations. Individual Task Mode was institutionally practiced in the intensive three-day learning module of the MPE/MAF programs of Business School, but not identified in other disciplines in the current investigation.

In Lecture Mode and Individual Task Mode, interaction is basically not intended, while both lecturers and students were always negotiating these two learning modes to create some sort of interaction or different learning modes. In the former case, for example, lecturers were frequently observed to introduce interaction in the middle of lecturing, negotiating the learning mode into Interactive Lecture Mode. Students were also taking initiatives to change Lecture

Mode into Interactive Lecture Mode by asking questions. In the case of Individual Task Mode, on the other hand, lecturers sometimes gave advice to a whole class to facilitate the task, making Individual Task Mode into Lecture Mode temporarily. Students were observed very frequently interacting among themselves to solve emergent issues or visiting the lecturer's work station to receive some advice, which means that they were negotiating Individual Task Mode into Private Type peer interaction or hierarchical interaction.

These two learning modes become conditions for Covert Type and Private Type of peer interaction respectively (Chapter 4, Section 3). These two types of peer interaction have the potential of being interesting research topics since both of these types are predicated on students' initiatives, and strong motivations on the students' side can be hypothesized to be working behind these phenomena. However, these types are not particularly within the scope of the current study. This study is designed to have a focus on the types of peer interaction that lecturers and students can collaboratively set up, create, and share. In this section, related findings, though limited in amount, are provided regarding the motivations and justifications of the choice of these two learning modes.

### **3.5.1. The lecturer's choice of Lecture Mode**

The interview data does not show any explicitly-stated motivation behind the choice of Lecture Mode at postgraduate courses, which might be mainly due to the research design with a focus on interaction and also possibly due to Lecture Mode being a default learning mode in educational contexts. This possibility can be discussed, using the data already referred to in other sections. Ian, a lecturer from Applied Linguistics, who was noted for his frequent and various use of peer and hierarchical interaction in all his classrooms, expressed the self-awareness of his own priority of information transfer to students' classroom activities under the tight constraints of time (Section 3.3.3.). Even Ben, an Engineering lecturer who introduced Presentation Task Mode as the main learning mode in his classroom, said he was prepared to complement his students' presentations to cover anything essential in the form of comment (Section 3.2.2.), which is likely to function virtually as Lecture Mode if it lasts some time. This format of learning, in which the target academic knowledge is transmitted from the lecturer who is supposed to be a specialist of

the target knowledge, to students who need the knowledge, seems to be integral part of the classroom learning to however varying degree.

It should also be noted again that the choice of Lecture Mode can be due to disciplinary essentials. An Engineering lecturer, Cheng, explained that the essentiality of mathematical or technical work in his discipline could be a hindrance to a major introduction of talking and oral interaction into his classroom (Section 3.1.1.(2)). He suggested that learning mathematical and technical work requires visual communication channels such as whiteboards, which might not be replaced by oral communication. Within this physical constraints, Lecture Mode becomes an essentially instrumental learning mode. Someone knowledgeable about the target academic knowledge needs to be located in front of the shared visual communication device in the classroom, such as a whiteboard and a monitor screen, to make sure that learners will be visually receiving accurate academic knowledge in disciplinarily appropriate procedures. In the classroom observations, too, lecturers and a tutor in Engineering and Business School were frequently writing on the whiteboards to explain some processes of mathematical or technically complicated formula, often silently over extensive time. The occurrence of Covert Type peer interaction in this learning mode might reflect this physical condition in some way. For example, students might feel, particularly in large classrooms, that they need to figure out among themselves what looks visually unclear or ambiguous on the whiteboard, before asking the lecturer.

### **3.5.2 Lectures' choice of Individual Task Mode**

In Individual Task Mode, each student individually engages in a task, and this learning mode becomes the condition for the Private Type of peer interaction (Chapter 4, Section 4.5.). In the interview with one lecturer in charge of finance-related courses in Business School, a range of factors were identified as motivations behind this learning mode. First of all, due to its disciplinary nature, his postgraduate course necessitates understanding and implementing mathematical computation (*disciplinary essentials*). While students are expected to learn this skill, his program is designed to appeal to students from different academic backgrounds with a minimum requirement of completing a Bachelor's degree, which means it will also

accommodate students who do not have strong technical or mathematical skills for finance studies (*students' existent resources*). The courses in the program are then strongly oriented towards the application of finance theories without digging deeply into their technical details (*learning objectives*). Computer skill development is included in the curriculum for this application purpose, which is a necessary tool in the students' future work situation (*future relevance*).

With these motivations, Individual Task Mode was chosen by the lecturer to be an optimal learning mode and a computer laboratory room was set up, where Private Type Peer Interaction was quite frequently observed, totaling 221 times in the space of 279 minutes of Individual Task Mode (Chapter 4, Section 4.5.). Interestingly, the lecturer explains how this type of peer interaction is favoured in consideration of when students encounter some issues while engaged in this learning mode;

So, students stay by yourself, you feel like you have a few questions. If it's only the lecturer, then it is hard to get in touch with the lecturer as often. Cause you got thirty forty students for only one lecturer. So you can't give everyone the same amount of time, but it's that what you can do is actually you can collaborate with other students, try to answer each other's question, so study in group works really good, I think especially for technical courses and, uhm, and then if there is something that's left unanswered or you are not convinced with the answer, then you could ask the lecturer. Otherwise you don't wanna, there is also I think truth to this, you don't wanna bother the lecturer every time you have a little question either. (Luke, Lecturer, Finance, Business School)

In his pedagogical belief systems, Luke takes peer supports in this learning mode both from the lecturer's and students' perspectives. He identifies pragmatic time constraints and affective barriers in hierarchical interaction as motivations behind his endorsement of peer support. Encountering a lot of "little" technical issues, which was presumed by Luke, his students were endorsed or in a way encouraged to support each other in developing technical knowledge and skills necessary for their discipline.



### **3.6. Summary of the choice of learning mode and corresponding peer interaction types**

In this section (Section 3.), factors that can influence the choice of each learning mode and its accompanying peer interaction type were compiled. The choice of a learning mode is constructed as a realization of the way the lecturer conceptualizes and implements teaching/learning under a particular set of contextual conditions. From this perspective, a range of themes emerging from the data were used as an analytical tool to systematically explore influential factors on choices of learning modes. A choice of each learning mode was found to be a unique product of decision making processes typically based on multiple factors, including learning objectives, temporal and physical settings of the education, and the lecturer's personal pedagogical beliefs. Peer interaction opportunities accompanying each learning mode were found to sometimes draw the lecturer's pedagogical attention (for example, in the case of Collaborative Task Type, Out-of-Class Collaborative Work Type, and In-Presentation Voluntary Type) while not particularly in other times (e.g. Voluntary Type, Covert Type, and Private Type). Overall, the occurrence of peer interaction in learning contexts were encouraged, appreciated, and exploited by the lecturers as being educationally beneficial, in various ways depending on their pedagogical beliefs. The next section will conclude Chapter 5 by presenting disciplinary profiles.

### **4. Chapter conclusion: Disciplinary profiles of motivating factors behind different learning modes**

This chapter has provided the findings regarding the second research question '*What factors might be involved in the creation and utilization of peer interaction in postgraduate educational practices across disciplines?*' The focus of this chapter was on the influential factors on the occurrence of peer interaction which can be attributed to the lecturers' conceptualization of teaching/learning. The framework for the understandings of the lecturers' involvement in the occurrence of peer interaction was presented, and a set of learning modes were provided as analytical units, together with reference points for analyses of motivations and justifications

behind the choice of learning modes. Factors behind each learning mode were explored under the guidance of this framework, and the complexity of processes of lecturers' decision makings on the choice of learning modes was described.

To conclude this chapter, disciplinary profiles are made to ethnographically describe postgraduate educational practices in terms of motivations and influential factors behind the lecturers' choices of learning modes.

#### **4.1. Factors influential on lecturers' choices of learning modes in Applied Linguistics**

The Applied Linguistics postgraduate educational practice was characterized by the abundance of Interactive Lecture Mode and In-Class Collaborative Task Mode (for the summary of the disciplinary use of learning modes, see Chapter 4, Section 5.). The lecturers shared the view that some sectors of the Applied Linguistics academic knowledge and skills have affinity to practices in the traditional classroom. Unlike many Engineering and economy- and finance-related courses, there is no need for complicated technical coding or mathematical work involved in Applied Linguistics postgraduate courses, therefore nor is there any need for specially designed classrooms as physical settings. Compared with the computer laboratory where each student is given a work station, for example, the traditional classroom setting affords more of Interactive Lecture Mode and In-Class Collaborative Task Mode.

Also, the lack of complicated technical work as disciplinary essentials makes it less necessary for Applied Linguistics students to have extensive time for information transfer guided by the lecturer in Lecture Mode to ensure accurate understanding and implementation of a set of mathematical procedures. Applied Linguistics lecturers seem to allocate this freed-up time to different types of activities, including discussions with students drawing upon their own personal perspectives and experiences. This synthesis of students' personal resources and the target academic knowledge/skills constitutes quite a large part of the disciplinary learning in Applied Linguistics. In its disciplinary nature, the theories, models, or hypotheses of Applied Linguistics entail practical applications to differing contexts, so that the students' personal acquaintances with different situations can be greatest resources for understanding the target academic

knowledge. This disciplinary nature is highly likely to impact on the choices of interactive learning modes in Applied Linguistics.

This characteristic affinity of disciplinary learning to interactive learning modes seems to allow Applied Linguistics lecturers to develop their personal pedagogical beliefs in talking and interaction as beneficial educational tools. Lecturers in Applied Linguistics seem to be more sensitive than Engineering and Business School counterparts to possible benefits of talking and interaction for a range of aspects of learning, and this belief is likely to impact once again on the choice of interactive learning modes. In-Class Collaborative Task in pairs or groups serves best from this view because it maximizes students' opportunities for talking and interaction. In summary, interactive language use is highly valued in Applied Linguistics and constitutes the dominant medium of learning activities. Students are thus naturally expected to actively engage in verbal communication in classroom learning contexts to their own and other peers' advantages. Abundant peer opportunities grow out of this sort of academic and educational environments.

#### **4.2. Factors influential on lecturers' choices of learning modes in Engineering**

The Engineering postgraduate education is characterized by the sheer frequency of Interactive Lecture Mode in the classroom. Out-of-Class Collaborative Task Mode was also often experienced by the students across different courses (for the summary of the disciplinary use of learning modes, see Chapter 4, Section 5.). The use of these learning modes in Engineering will also be explained here as multiple factors intertwined among themselves.

Firstly, given that the core activity of this discipline, as its name suggests, is to engineer artefacts, all the courses in this discipline are skill-oriented, and students are basically required in any postgraduate course to use its academic knowledge to make things. The observations, however, confirmed that classroom learning does not serve to give students opportunities to practice any new engineering skill nor to actually make the artefacts. Classes were held in the small traditional classroom settings, not in a computer laboratory equipped with individual work stations, and no student was observed to bring their own lap-top computers into the classroom.

Obviously the core part of their disciplinary essentials is not done in but outside of the classroom, and the classroom learning functions for other purposes than to implement engineering skills as academic knowledge.

Secondly, this observed lack of opportunities to make things in the classroom can be understood in consideration of the Engineering postgraduate students' existent skillsets for making artefacts. Student and lecturer interviewees confirmed that postgraduate-level students have already acquired basic algorithmic and programming skills from their undergraduate-level studies and that they can learn any additional advanced skill at home or in the laboratory, drawing on the provided materials without helping hands of the lecturer or tutors. These expected existent resources of postgraduate students would free up classroom learning time so that the lecturer could set up different learning objectives there.

Thirdly, the Engineering lecturers frequently lay learning objectives in relevance to their students' future situation, where the acquired academic knowledge is actually used and developed. One of the future situations is research situation, and the other is industry, or real-world work situation. Each target situation was conceptualized to require important skills for postgraduate students to learn, specifically, critical thinking skills for research and team-work skills for industry. The learning modes chosen by the Engineering lecturers strongly reflect relevance to these future situations, and the commonly observed learning modes set up for these objectives are Interactive Lecture Mode and Out-of-Class Collaborative Task mode respectively. Critical thinking skill development is led by the lecturers in the classroom, with the students discussing given academic materials, not just receiving information about the materials from the lecturer. The small class size affords this learning activity. On the other hand, collaborative engineering skills are developed outside of the classroom, managed basically on students' own. Types of peer interaction in Engineering is thus afforded and constrained by the frequent use of these two learning modes.

#### **4.3. Factors influential on lecturers' choices of learning modes in Business School**

In Business School, the educational practices were differently identified between sub-disciplinary postgraduate programs, MAF/MPE and MBA. The former was characterized by

Interactive Lecture Mode combined with extended Lecture Mode in the lecture theatre setting and also Individual Task Mode in the computer laboratory setting. The latter was observed to be generally more oriented towards Lecture Mode and Interactive Lecture Mode in the lecture theatre (for the summary of the disciplinary use of learning modes, see Chapter 4, Section 5.). Students in both programs were found to be actively asking questions to develop and deepen their understanding of the academic knowledge they were receiving, while the interaction was basically hierarchical, without developing into the Voluntary Type peer interaction as a classroom discussion. Learning objectives based on disciplinary essentials and future relevance, and physical settings were found to highly likely impact on these choices of learning modes.

As for disciplinary essentials in the MAF/MPE program of Business School, the learning objectives were set up to develop skills at the manipulation and analysis of statistic data as well as knowledge of the theoretical underpinnings. The understanding of mathematical models was mediated by the lecturer's explanation of the processes of theoretical models using slides and whiteboards, and the computational analysis was actually practiced by students at an individual work station in the computer laboratory. On the other hand, the MBA program is cross-disciplinary by its nature, with the learning objective set up to develop a broad range of relevant knowledge and skills across different disciplines, rather than advancing deeply in a narrow range of knowledge areas. Its classroom learning is carried out in learning modes in which students receive basic information they were not necessarily acquainted with in their past careers. The difference between MAF/MPE and MBA in disciplinary essentials is thus reflected in the form of different choices of physical settings and learning modes, which in turn afford and constrain types of peer interaction occurring in the educational practices.

Despite these differences, however, the pedagogical focus is shared between MAF/MPE and MBA on the application of academic knowledge in real-world work situations, not on the development of academic knowledge in the research field. The contents to be learned in these programs were differentiated from those in other research-oriented postgraduate programs. For example, the students in MAF/MPE program would not have to know the processes of proving mathematical theories but need to know the basics to apply them. The difficulty level of the contents for the postgraduate program is generally modified, and meta- or critical knowledge and skills for advancing academic knowledge are not particularly focused on. The students' future

work situations require application knowledge and skills, not research knowledge and skills. In the MBA program, too, the learning objectives and contents are controlled so that the students will not have to learn too much detail irrelevant to the students' future management situations. Besides this, the development of pragmatic competence is incorporated into the learning objectives of the MBA program. Management as the future situation is conceptualized to involve people skills in the complex real world, and this attention impacts on every part of the MBA education, including the choice of learning modes. Out-of-Class Collaborative Task Mode is, for example, set up as one of the learning modes in which to develop social skills required for managers in the real world.

#### **4.4. Summary of disciplinary profiles and cross-disciplinary factors on the lecturers' choice of learning modes**

In this section, the educational practice of each of the three disciplines investigated was summarized in terms of motivations behind lecturers' choice of learning modes. Each disciplinary practice was described as an entity uniquely influenced by general factors including learning objectives, the lecturer's pedagogical belief systems, and physical conditions. Learning modes and the accompanying peer interaction opportunities are created and utilized in this complex phenomenon of a disciplinary educational practice.

While each practice is a product of a compound function of multiple variables with different values, cross-disciplinary elements can also be factored out among the three educational practices investigated. This is possible by paying attention to recurrent themes emergent in the data. Firstly, *learning objectives* of postgraduate courses and programs were often found to be set up on the basis of the attention to *future relevance* of the learning objectives. Postgraduate education is here conceptualized to be the development of knowledge and skill sets required in specific future situations, academic or industrial. It tends to be oriented towards the use and generation of academic knowledge in the target situations, which is more than simply receiving and developing basic knowledge. Secondly, *the lecturers' pedagogical beliefs* across disciplines tended to be in the value of students' active engagement in learning activities. The lecturers with this preference shared the view as to issues around passively receiving information as well as

educational benefits of autonomous problem solving, speaking, and interaction. In most cases, *the physical settings* of postgraduate courses tend to accommodate this preference of the lecturers’.

These identified factors particularly impact on the lecturers’ pedagogical choice of the type of learning modes in which students are supposed to be actively using the target academic knowledge as learning objects, far beyond receiving necessary academic information. In this sense, a cross-disciplinary element of postgraduate educational practices can be described as an orientation towards active learning. Various identified factors specific to the postgraduate level learning collectively function as a mechanism of motivating the lecturers to create and maintain the active learning in postgraduate education. Collaborative learning is promoted in this educational environment. Lecturers set up conditions of, and also often directly create, peer interaction opportunities for their students in this active learning practice. The next chapter will document the student-driven factors that can afford and constrain the creation and utilization of peer interaction opportunities at postgraduate level.

## Chapter 6: The Postgraduate Students' Resources for Peer Interaction

### 1. Introduction

The previous chapter focused on the lecturers' involvement in peer interaction in postgraduate courses and described how the creation of peer interaction is influenced by a range of factors on the lecturers' part. The lecturers set up learning modes in and outside of the classrooms as conditions under which different types of peer interaction may occur (see Table 4.1 in Chapter 4, Section 2 for the relation between learning modes and peer interaction types). Their decision makings on learning modes can be understood as a function of three general variables; learning objectives they set up for postgraduate courses, pedagogical beliefs they hold, and physio-temporal conditions affording and constraining their pedagogy. This chapter turns a focus from the lecturers to the students and approaches the second research question raised at the end of Chapter 2;

*What factors can be involved in the creation and utilization of peer interaction in postgraduate educational practices across disciplines?*

Specifically, this chapter explores how postgraduate students can be mutually resourceful and contribute to maintaining collaborative learning environments as well as how NNSE international students can experience the learning environments. Information thus obtained will help EAP learners understand and accommodate the new educational practices.

With the focus on student-related factors of the creation and utilization of peer interaction, some within-student variations receive particular attention so that findings would be informative for the EAP practitioners and learners. The parameters involving these variations are study status (local students or international students) and English nativeness (native-speaker-of-English or NSE students or non-native-speaker-of-English or NNSE students). Generally in the contexts of the current investigation, these parameters overlap with each other (e.g. NSE/local students and NNSE/international students), though there are some minute variations, such as NNSE local students who immigrated into New Zealand when they were young or NSE international students who came from the U.S. for job opportunities. Considering these variables,



next, the original research questions were operationalized into the following three guiding questions:

1. *Might study status/English nativeness be involved as influential factors on students' creation and utilization of peer interaction in postgraduate educational practices?*
2. *If study status/English nativeness is involved, how might it influence students' creation and utilization of peer interaction in postgraduate educational practices?*
3. *What other factors might be involved in students' creation and utilization of peer interaction in postgraduate educational practices and how?*

Guided by these questions, investigations were made into both NSE/local students' and NNSE/international students' participative patterns in the active learning practice of postgraduate education as well as influential factors that could impact on their behaviours. Interviews with nine local students and 15 international students across three disciplines (see Chapter 3, Section 5.2.2.) were analyzed to answer the research question. The interview guides are appended (Appendix 3 and 4).

This chapter is organized in the following order: First, findings are provided as to whether variation in study status/English nativeness appears as differences in students' participation in active learning in postgraduate educational contexts. Postgraduate students' perceptions are explored regarding differences between NSE/local students' and NNSE/international students' behaviours in educational interaction. Secondly, factors involved in the creation and utilization of peer interaction are conceptualized, based on the recurring themes found in the data. The framework of students' *educational interaction resources* is proposed as a product of this analysis. Thirdly, the framework of students' *educational interaction resources* is used as reference points to provide evidence that students' participation in interaction is a result of multiple, often intertwined, factors and that behavioural differences between NSE/local students and NNSE/international students can be explained by differences in their existent *educational interaction resources*. The chapter ends with a summary of the findings.

## **2. Perceived impact of study status/English nativeness on the creation and utilization of educational interaction**

In this section, findings are provided in response to the first one of the guiding questions raised in the previous section, namely:

*Might study status/English nativeness be involved as influential factors on students' creation and utilization of peer interaction in postgraduate educational practices?*

Postgraduate student interviewees were asked whether they found any difference between NSE/local and NNSE/international postgraduate students in classroom interaction. A general finding as to this question was that study status (local or international) and English nativeness (native or non-native) were perceived by postgraduate students as influential factors on students' creation and utilization of both interaction with the lecturer (hierarchical interaction) and interaction among students (peer interaction). Analyses revealed that the differences were conceptualized by students in a range of distinctive ways, including (1) amount of participation in interaction, (2) active questioning and commenting, and (3) initiatives to lead. Each of these will be described in turn.

### **2.1. Differences in the amount of participation in classroom interaction**

The interview data from international students showed that there was a general difference between NS/local and NNSE international students in their behaviours in the educational interaction, hierarchical or peer. Rachel, a NS local student, cautiously described what she found as a difference in the amount of talking between NSE students and NNSE students in the following way:

I think, in general, in the classes I've been in this year, uhm, I think some native speakers will have a longer turn, maybe, speak a little bit more longer, and try to, uhm, maybe, I think, yeah, possibly some of them are more confident to, sort of, express themselves and, uhm, yeah, it seems like they might be talking about, length-, more lengthy. (Rachel, NS local student, Applied Linguistics)

Rachel here described the difference in the quantity of talking between the two groups of students, and she conceptualized English nativeness as a factor that would influence the difference. This general impression of Rachel's was shared by a NNSE international student from Business School. She focused on international students' classroom behaviour in this quote:

The (NNSE students') participation would be quite low. I don't remember them saying anything. Like, even I, like, you know, if I classify as an international student, I normally don't really say much as well, you know. I just kind of listen more. (Nadia, NNSE international student, Thai, MBA, Business School)

In Nadia's perception, her NNSE international student classmates did not participate and talk a lot in the classroom interaction, while she implies NS/local students would behave otherwise.

## **2.2. Differences in active questioning and commenting**

Interview data show that students also noticed that NS and NNSE students would differ specifically in pragmatic moves in Interactive Lecture Mode. An Indonesian Business School student described local students' willingness to solve emergent problems in their learning by creating interactive learning modes and asking questions:

Kiwi just, if they want to ask question or want to give their opinion, they just talk, I mean, without raising, raising their hands, just talk. And then the lecturer will stop there, stop talking, and giving time for student, yeah. (Jerri, NNSE international students, Indonesian, MAF, Business School)

Jerri identified the characteristic behaviours of "Kiwi" students, which are local students, by pointing out that they were willing to ask questions and make personal comments in casual ways. Other students also noticed the difference between NS/local students and NNSE international students when they felt they needed to deal with emergent questions in the lecture. A Chinese student described the strategy their Chinese friends could use when they came up with questions in Lecture Mode:

Of course, Chinese students are usually quiet and seldom ask questions in lecture....But, some of Chinese students would ask questions in the class break. Or rather, they prefer to communicate privately. (Xuekun, NNSE international student, MPE, Business School)

The current researcher's observations in MAF/MPE classrooms confirmed the behaviours described here as well. NNSE international students were seen going to the lecturer or to other students during the class breaks, or engaging in Covert Type Peer Interaction while the lecture was still going on. These behaviours might be interpreted as NNSE international students' avoidance of asking questions in Interactive Lecture Mode or a whole classroom interaction as well as preference towards hierarchical or peer interaction carried out in private.

Besides this avoidance and preference, a possibility was mentioned by another Business School student from Asia that his fellow Chinese students might often use a yet more passive strategy when they came up with some questions, which he said constituted a stark contrast to the local students' learning strategy:

In China, if we have a problem in terms of academic question, we cannot get an answer, "Ok just let it go." But at least my classmates, if they have some questions, they will try their best to get answer. Kiwi students..... they need find out the answer. (Isaac, NNSE international student, Chinese, MPE, Business School)

While it is possible to sense positivity in Isaac's evaluation of local students' learning strategies compared with a typical Chinese attitude, another international student also shared this attitudinal difference between local and international students but on a slightly critical note:

They (= local students) are competent to say what they want to say, to express themselves. It seems that they are comfortable to say something not sometimes not really related to the topic. (Jasmine, NNSE international student, Taiwanese, Applied Linguistics)

Regardless of these differing nuances of the evaluations, the willingness to create interaction and ask questions and make comments was shared in the perception of Isaac and Jasmine as a general behavioural tendency of NSE/local students.

### **2.3. Differences in initiatives to lead**

International student interviewees considered NSE/local students to engage more actively than NNSE/international students when a learning mode was In-Class Collaborative Task as well. A Hong Kongese Applied Linguistics students described how actively local students tended to play a leading role in group or pair work:

In NZ context, which is multi-cultural context, it's either the Kiwi student pick up the leading role, or role to start talking, or it is me or some students from Asia just wait for the Kiwi student to start..... Asian students tend to be more (reserved). (Grace, NNSE international student, Hong Kongese, Applied Linguistics)

Study status is clearly working as an influential factor on the utilization of peer interaction opportunities here in Grace's perception, and this observation of behavioural differences was similarly shared by another international Applied Linguistics student, in terms of English nativeness:

When it is native speaker and non-native speaker, I think mostly that native speaker will try to keep checking if the non-native speaker follow up his or her thought, and does he, the non-native speaker agree..... Usually native speaker lead the conversation, so kind of more towards native speaker way, 'cause we just tend to be like "yeah yeah yeah, agree, yeah, that's right". (Ruby, NNSE international student, Taiwanese, Applied Linguistics)

These two quotes combined depicted NSE/local students' more active and NNSE/international students' less active roles in collaborative work. In the conversational floor which NS/local students initiated and held, NNSE international students were likely to be led along by NS/local students, signaling their supporting roles with such communicative devices as backchannels.

### **2.4. Summary of difference NSE/local students and NNSE/international students**

The above-mentioned three angles that student interviewees brought up in their interviews contribute to generally understanding how distinctively NSE/local students and

NNSE/international students will create and utilize interaction for their learning development. In the students' perception, NSE/local students tended to be more active than NNSE/international students in creating and participating in any classroom interaction. The former generally talked more, asked more questions and commented more in Interactive Lecture Mode, and tended to take a leading role in In-Class Collaborative Task Mode. On the other hand, the latter was less active in the creation and utilization of interaction opportunities in a whole class setting as well as in group work, with tendencies to be led and guided by NS/local students. Overall, educational interaction at postgraduate level was considered to be dominated by NS/local students' active contributions. The postgraduate students found study status/English nativeness to be an influential factor on participation in educational interaction.

The ways in which NSE/local students actively ask questions of the lecturer, negotiating Lecture Mode into Interactive Lecture Mode, and take initiatives to play a leading role in Collaborative Task Mode can be understood as a realization of active learning as was described in the previous chapter. Their ways of actively creating and utilizing interaction opportunities present evidence that they had competence and resources required to participate in the active learning practice at postgraduate level. Students' study status/English nativeness can then be understood to be part of the competence and resources.

The next two sections will address what factors, including study status and English nativeness, might be involved in the perceived behavioural differences between NS/local and NNSE international postgraduate students. Familiarity to local educational practices, language related factors, subject domain knowledge, and social relationships will be highlighted as factors collectively impacting on students' participation in peer interaction.

### **3. Educational interaction resources**

This section and the next section will provide answers to the second and third guiding questions:

- *If study status/English nativeness is involved, how might it influence students' creation and utilization of peer interaction in postgraduate educational practices?*
- *What other factors might be involved in students' creation and utilization of peer interaction in postgraduate educational practices and how?*

In this section, the framework of students' *educational interaction resources* is proposed. This framework is grounded in recurrent themes that emerged through the qualitative analyses of the interview data with postgraduate students. The constituent elements of the framework are described as factors that will explain the processes of students' creation and utilization of peer interaction as well as differences between NSE/local students' and NNSE/international students' behaviours in educational interaction. In the next section, the framework will be referenced to explain how multiple factors can impact on students' participation in active and collaborative learning in postgraduate educational contexts.

### **3.1. Components of students' educational interaction resources**

Different levels of themes and categories emerged in the processes of analyzing the student interview data, and these categories collectively constitute a conceptual framework that will help systematically describe how NSE/local and NNSE/international postgraduate students decide to or not to create/utilize educational interaction, including peer, in a particular situation. The factors that can influence these creation/utilization processes of educational interaction are constructed as 'resources' in this framework. *Educational interaction resources* refers to a collective body of what students can draw upon in their decision-makings on the creation and utilization of interaction opportunities for the development of their own or others' learning. Here are four major resources identified to become constituent elements of the proposed framework:

- Linguistic resources
- Domain knowledge resources
- Social relation resources

- Learning resources

These resources address different dimensions of educational interaction opportunities in educational contexts.

Students vary in terms of their own educational interaction resources and even the same student may have different sets of educational interaction resources across different learning contexts. For example, NSE/local students may be more acquainted with local educational practices than NNSE/international students are. Also, the former may have more linguistic resources than the latter in terms of a range of parameters, such as fluency, accuracy, complexity, and variety. As for within-student variation, on the other hand, usually active students may be hesitant to participate in interaction in a particular situation, perhaps discouraged by their perceived lack of relevant domain knowledge. Holistic reference to this framework is expected to account for different variations in the creation/utilization of educational interaction across and within students. The following sub-sections (Section 3.1.1. to 3.1.4.) will briefly summarize the constituent elements of this framework and address what sub-components each of them have. Section 4 provides the evidence of the constituent elements of this framework.

### **3.1.1. Linguistic resources as a component of educational interaction resources**

*Linguistic resources* are the communicative resources that students draw upon for speaking and listening in oral interaction. These resources reflect *English nativeness* as an influential factor mentioned in the previous section (Section 2.). The current data shows that native-speaker of English (NSE) students are better equipped with necessary linguistic resources in the English-medium educational contexts than non-native-speaker-of-English (NNSE) students. A range of sub-categories emerged in the interview data in relation to these resources, examples of which are accent, speed, and vocabulary in listening related resources as well as accent, fluency, accuracy, functions, preparation and turn taking in speaking related resources. NSE/international students were found to be particularly attentive to possible shortage of their own linguistic resources. The table below shows the constituent categories of linguistic resources (Table 6.1):



*Table 6.1: Linguistic resources as a component of educational interaction resources*

Theme	Sub-theme	Categories identified
Linguistic Resources	Listening related resources	Accent, speed, vocabulary
	Speaking related resources	Accent, fluency, accuracy, preparation, turn taking

Details and examples of linguistic resources from the data will be provided in Section 4.1..

### **3.1.2. Domain knowledge resources as a component of educational interaction resources**

*Domain knowledge resources* are the knowledge resources that students can draw upon which are relevant to the contents of the target academic learning. When students talk about and listen to academic or relevant topics in interaction, they use their existent domain knowledge resources. Two general categories of domain knowledge resources were identified in the data. One of them is *academic knowledge*, which is a set of disciplinary, subject content knowledge and essential skills. This type of knowledge constitutes the core part of learning that students deal with in their educational contexts. The other category is *personal knowledge*, which is knowledge and skill sets which students privately developed through their own professional or real world experiences outside of the academia. In postgraduate educational contexts, personal knowledge is often greatly valued in relation to the acquisition and use of the target academic knowledge, as shown in Chapter 5, Section 3.1.1.. Below is the table that shows the components of Domain Knowledge Resources and identified categories (Table 6.2):

*Table 6.2: Domain knowledge resources as a component of educational interaction*

Theme	Sub-theme	Category Identifies
Domain Knowledge Resources	Academic knowledge	Academic knowledge Academic tool skill Academic knowledge utility Academic knowledge generation
	Personal knowledge	Personal experience Personal knowledge Personal perspective

Details and examples of domain knowledge resources from the data will be provided in Section 4.2..

### **3.1.3. Social relation resources as a component of educational interaction resources**

*Social relation resources* are the resources for students to draw upon to deal with interpersonal aspects of interaction. Students' existent friendship with other classmates, for example, can be important resources when they try to engage in educational interaction in the classmate. Each student's person skills also impact on this aspect of educational interaction. For example, innately shy students may participate less in interaction with other students. Students acquire their share of these resources mainly through their previous experiences of social interaction in different contexts and in the target context. Knowledge, skills and preference are nourished through these experiences regarding how students can or should behave in a particular social situation or how they can solve or let go of certain types of interpersonal issues. Students'

history of social interactions in a particular context also leads them to establish their social community where they feel comfortable/uncomfortable. The identified components of social relation resources that are grounded on the data are shown in the table below (Table 6.3):

*Table 6.3: Social relation resources as a component of educational interaction resources*

Theme	Sub-theme
Social Relation Resources	Social bond
	Maturity

Details and examples of social relation resources from the data will be provided in Section 4.3..

### **3.1.4. Learning resources as a component of educational interaction resources**

*Learning resources* are those which students draw on to determine what actions they take for their learning development when they are involved in different learning modes, such as Lecture and In-Class Collaboration Task. Since the acquisition of these resources involves students' previous experiences of educational practices and learning modes, a student's behaviour in a learning mode is personally as well as culturally driven. International students from Asian countries, for example, may behave in their classroom interaction according to their own usual behavioural patterns in their own countries, with a result that they may create an impression with local students that they are very shy by their very nature. In this scenario, the learning resources the international students have are different from those of the local students. The parameter of *study status* as mentioned in the previous section (Section 2.) is now incorporated as 'learning resources' into the framework of educational interaction resources. Below is shown the table that describes components of these resources based on the themes found in the data (Table 6.4):

Table 6.4: Learning resources as a component of educational interaction resources

Theme	Sub-theme	Categories Identified
Learning resources	Active learning resources	Active knowledge reception Active knowledge use Activity management
	Intercultural learning resources	Awareness of differences in behavioural patterns Knowledge and skills for active learning resources

Details and examples of learning resources from the data will be provided in Section 4.4..

### 3.2. Summary of the framework of educational interaction resources

In this section, the framework of *educational interaction resources* is described in a concise way. The framework is constructed of the themes and categories identified in the qualitative analysis of interview and observation data. Four major themes (*linguistic resources*, *domain knowledge resources*, *social relation resources*, and *learning resources*) are presented as constituent elements of the resource system to be employed in students' decision makings on actions in educational interaction. Each of the themes is broken down into layers of sub-themes and categories to make a hierarchical system. This holistic model is expected to account for different behaviours in educational interaction within and across students and student groups. In next section, detailed descriptions with empirical evidence will support this model and illustrate how postgraduate students perceive their own and peers' creation and utilization of interaction opportunities in different learning modes.

## **4. How students draw upon educational interaction resources**

In this section, the framework of *educational interaction resources* that was conceptualized in the previous section (Section 3.1.) is employed to explain how postgraduate students create and utilize educational interaction opportunities for their learning. Four main resource categories of educational interaction resources, namely, *linguistic resources*, *domain knowledge resources*, *social relation resources*, and *learning resources*, will be in turn explained/discussed with empirical evidence from interview data with NSE/local and NNSE/international postgraduate students.

### **4.1. Linguistic Resources**

Two sub-categories, *speaking-related* and *listening-related resources* were found as students' linguistic resources for participating in interaction. NNSE international student interviewees raised issues around these resources in interaction with their peer NSE/local students. Only one international student said she found no linguistic issue with interaction with peers because of her long-term experiences in interacting in English through her secondary and tertiary education as well as job opportunities in NZ. All other international student interviewees, however, experienced in some way the incongruence between the linguistic needs and resources in their postgraduate learning.

#### **4.1.1. Listening-related resources**

International students generally experienced the incongruence between the needs and resources around listening to NSE/local students. The perceived major sources of problems involved local NSE students' delivery of speech, specifically, *speaking rate* and *accent*, and their colloquial way of speech.

#### 4.1.1.1. Resource shortage: issues with local students' delivery of speech

The international student interviewees raised the speaking speed of local/NSE students as an issue which would cause understanding difficulty when they participated in peer interaction. One Indian student's comment represents this perspective in a fundamental way:

Sometimes, to understand some people, basically they speak fast. Their faster English is hard. (Nathan, NNSE international student, Indian, Engineering)

One student implied the fast speech rate could cause problems with the identification of the spoken form of words and phrases:

They will connect sounds when they speak fast. They connect words, really squeeze words together. (Jasmine, NNSE international student, Taiwanese, Applied Linguistics)

This issue seemed to become trickier to handle when it was combined together with another issue related to delivery of speech. One student described this amalgamation as follows:

My English is not so good, so sometimes if you are a little bit frustrated in communicate with Kiwi students, sometimes maybe, yeah, they are very friendly, I know, and they are very (considerate), but sometimes they speak too fast and they never open their mouth, so ... a lot of time we just sit down and chat with each other. I cannot even catch up with the speed. (Isaac, NNSE international student, Mainland Chinese, Business School)

In peer interaction, Isaac occasionally encountered situations in which his listening-related resources could not cope with NNSE/local students' speed of delivery and ambiguous pronunciation. This problematic combination of NSE/local students' fast speech rate and their distinctive way of pronouncing words were recognized by native speaker of English international students as well. An NSE student from the US shared the perspective as follows:

I personally have issues understanding accents. Especially Kiwi accents. Kiwi tend to speak softly and mumble and kind of get through sentences really fast. That was hard for me, just too fast. (George, NSE international student, American, Engineering)

These shared difficulties with the local delivery of speech shows that international students' personal linguistic resources for listening might be already tuned into some English varieties.

They may have already established a particular familiarity with some English variety and they have done so through their past English use or learning processes. This established familiarity work as listening-related linguistic resources, causing issues when international students interact with their local peers who have unfamiliar accents. Obviously, this shortage of relevant resources will impact on the way international students participate in peer interaction.

Regarding this widely experienced resource shortage, on the other hand, students also mentioned the possibility of being able to overcome these difficulties over time. A student from Applied Linguistics succinctly described this problem solving process as follows:

At the beginning, Kiwi accent was really a problem, uhm, but now I feel that only some Kiwi students have a really strong Kiwi accent. (Jasmine, NNSE international student, Taiwanese, Applied Linguistics)

Jasmine suggested here that she developed linguistic resources over a period of time that could accommodate the unfamiliar local accents to a great extent. She did not particularly conceptualize how she developed these linguistic resources, but it was likely that her raised familiarity with local varieties became her new resources, which helped her overcome her initial language difficulty.

#### 4.1.1.2. Resource shortage: issues with local students' colloquial way of speech

The other major problematic aspect of listening that was mentioned by international students was local students' use of colloquial speech. One engineering international student termed this casual way of speech as 'very common language' and he said that this way of speech caused him comprehension trouble, especially when NSE/local students and NSE lecturers talk to one another:

I feel very difficult to understand what Kiwi people say. Especially when they talking to other. Even my lecturers, when they talk to the whole class, he use a different language. It is very common language, and the speed of talking is somehow not very fast, but they talk to the other especially when they talking about the topic that outside of the topic we are talking about in the class. It's outside of the presentation, and especially when they

making joke, I can't totally understand what they are talking about. (Bin, NNSE international student, Vietnamese, Engineering)

While Bin mentioned topic, which is conceptualized as domain knowledge in the current framework, as a potential element that might have caused comprehension issues, he sensed local students and lecturers using 'a different language' although it was a 'very common language' as well. Bin's sensitivity to different ways of speech employed by NS/local speakers was actually verified by an NSE/local student. She was self-conscious that she would switch her ways of speech between different types of interlocutors:

I don't communicate with them [= NNSE international students] exactly as I would communicate with Kiwi, for example.....it's more of subtle, not a great deal of difference. (Sonia, NSE local student, Applied Linguistics)

This 'subtle' difference as Sonia put it might cause great trouble to NNSE students, like Bin, when they are listening to exchanges among NSE students and lecturers. The issues attributable to this type of resource shortage could naturally influence NNSE/international students' participation in educational interaction.

#### 4.1.1.3. Interactional strategy for linguistic resource shortage

Experiencing these sorts of resource shortage issues mentioned above, NNSE/international students were found to take a range of courses of action they felt necessary to address their perceived issues. An Indonesian student from Business School said she would use some recording device to be able to check out later so that she could reduce cognitive burden while listening with concentration in class. Other international students would like to draw on interactive strategies to solve immediate emergent issues, such as asking to slow down:

Sometimes I find quite hard to understand them. Sometimes they speak really fast. Sometimes I ask them to explain a little bit yeah slowly so that I can understand them fully. (Josh, NNSE international student, Papua New Guinean, Engineering)



This seemingly orthodox way of addressing comprehension issues in interaction, however, may not be unconditional in the classroom learning contexts. An Engineering student said that a pair-interaction situation would better accommodate the use of this strategy than other situations:

In term of face-to-face talking thing, one person to one person with Kiwi, I'm confident because we have chance to re-ask the question. (Bin, NNSE international student, Vietnamese, Engineering)

However, this condition was not always met in educational contexts, according to Bin, and there was a time when he felt this strategy could not work well:

But in the group, we are alone and there are four students four Kiwis, and they're talking, we cannot ask them repeat that every time. So it's still hard to involve in the group with only Kiwis. (Bin, NNSE international student, Vietnamese, Engineering)

This difficulty in asking questions to address emergent listening and comprehension issues in collective interaction was shared by two other international students:

(I) felt stupid of asking them to slow down, because my English is not that bad. It's a matter of face. (Grace, NNSE international student, Hong Kongese, Applied Linguistics)

Sometimes I don't want to ask because the other students are, they understand it. I don't want to slow down the class just because of me. (Nicholas, NNSE international student, Spanish, Engineering)

The hesitation felt by Grace and Nicholas to ask questions here confirms that interpersonal dynamics of the group interaction can operate in classroom contexts to impact on an NNSE student's use of interactive strategies. To avoid this possible impasse, Grace drew on her NNSE student community as resources, as she said;

I tend to avoid grouping or sitting with Kiwi because Kiwi accent is really hard to understand. (Grace, NNSE international student, Hong Kongese, Applied Linguistics)

She implied that she strategically grouped with or sat next to international students to avoid issues with linguistic resource shortage in interaction with local students. Other students also shared this strategy of avoiding interacting with local students. Ninxing, a student from China,

summarized Chinese students' tendency to draw on social relation resources among themselves without even using English.

Most of Chinese students prefer to have a discussion in Mandarin during the break. Everything will of course become easier to understand in L1. (Ninxing, NNSE international student, Chinese, Finance, Business School)

Since the process of information comprehension is considered as an essential part of any learning activity, the impact of the shortage of listening related resources in educational interaction is significant. Obviously this potential linguistic incongruity between needs and resources will influence greatly the way they participate in peer interaction in English as a medium of educational communication. The above-mentioned evidence suggests that there might be cases in which NNSE/international students' perceived inactiveness in interaction can be attributed to comprehension difficulty due to issues around listening-related resources.

#### **4.1.2. Speaking related resources**

Adding to listening related resources, the international students stated that there is also a gap between their needs and linguistic resources when they speak English in educational interaction. They were aware of differences in their own interactive behaviours in the classroom and attributed the differences to their issues around speaking English, involving fluency, accent, vocabulary, and confidence.

##### **4.1.2.1. The impact of a shortage of speaking resources on classroom behaviour**

Students noticed their shifts in behaviour in the classroom from home country contexts to NZ contexts, saying that this was due to different levels of proficiency between their first and additional languages. Grace, an international student from Hong Kong, explained the process of how her Chinese and English use impacted on her classroom behaviours:

In terms of participating in class, I think, using L1 in the classroom in Kiwi classroom, definitely I will be even more active. In terms of peer discussion, I think no matter if that person is Kiwi or Chinese, if I'm using L1 as my medium of communicating, I can definitely be able to deliver my ideas more fluently. (Grace, NNSE international student, Hong Kongese, Applied Linguistics)

Sem, an Indonesian international student, also implies that his behaviour varied greatly between the two educational contexts:

‘[Back in his home country] I was so active. I talk a lot and even my lecturer would say, “would you please stop saying things?” (Sem, NNSE international student, Indonesian, Applied Linguistics)

While these two international students shared their general differences in activeness in the classroom between two contexts, Isaac from China shared his dilemma due to the shortage of linguistic resources in the NZ context specifically when he wanted to answer the lecturer's question:

Sometimes I already know the answer. I know the answer the lecture desire, but I don't know how to say that all, explain it clearly. If I can use Mandarin, my mother language, I can explain as language as possible as I can. (Isaac, NNSE international student, Chinese, Finance, Business School)

He noticed that his speaking-related linguistic resources in the NZ context could be short of what he needed even when his domain knowledge resources were perceived as enough. This resource shortage could impact on his behaviour in the classroom.

#### 4.1.2.2. Resource shortage: Fluency

International students raised specific aspects of speaking as problematic for them in interaction. Fluency was found to be one of them. One international student from China detailed the process of his generating an answer to a question given by the lecturer and how negatively his fluency level in English affected his participation in educational interaction:

Sometimes ... when I think about that how to translate the answer into English, someone else will give the answer. Yeah and I will miss the chance. And on the other hand, if I just speak out, if I didn't prepare it and just speak out my answer in English, sometimes it would be puzzled or confusing, so I need to explain again and again.... Even sometimes you know the answer and we (*unintelligible*) engage in the discussion in classroom, but you know we need to spend more time to construct our answer because we need to think about the answer in my mother language and we need to translate it in English. When I done all those things, "OK", the lecturer move to another question. (Isaac, NNSE international student, Chinese, Finance, Business School)

Here Isaac explained how his fluency in English did not accommodate his intended active participation in the classroom interaction. Within perceived time constraints of educational interaction, he experienced difficulties in giving answers in English to questions given by the lecturer. His speaking related resources could not meet his needs in the target interaction situation.

#### 4.1.2.3. Resource shortage: Accent and vocabulary

Students also found the sources of speaking-related issues in their linguistic features, such as accent and vocabulary. An international student from Papua New Guinea identified his own accent as a potential source of the problem when he engaged in peer interaction:

Maybe sometimes they, locals, they don't understand the way we speak. When I speak to them, they couldn't quite understand me. They ask me to explain what I really mean. Yeah, that's a thing I always, they don't seem to understand the way you, maybe because of the accent. They don't tend to understand us completely so (*unintelligible*) they ask us to explain again. (Josh, NNSE international student, Papua New Guinean, Engineering)

Another student emphasized difficulty in using appropriate pronunciation and vocabulary in interaction:

Because, I think, the pronunciation and using like a collocation, it's not correct..... So that's the difficulty we have to improve, in terms of using words and using collocation.  
(Bin, NNSE international student, Vietnamese, Engineering)

These two quotes show that, while international students might be aware of problematic features in their use of English in educational interaction, they could not necessarily address them easily.

#### 4.1.2.4. Resource shortage: Confidence in speaking

There was a gap among NNSE international students in their confidence in speaking English and how to handle the issue with confidence. Sem, an Indonesian student, was sensitive to the interlocutor's reaction, which greatly influenced the way he participated in interaction. He emphasized the impact of his interlocutors' incomprehension of his speech:

With international students, I don't see issues. Sometimes it's easy to manage when we got like communication break-down between international students. But with native speakers, to me, it matters a lot. I wanna say "judgement" like the way they react to your English..... Sometimes, you know, you want to say many things but ah the way you participate, you have to be careful. Sometimes when you are trying to produce and you see some kind of gesture, like your lecturer probably doesn't understand or what? It matters a lot. (Sem, NNSE international student, Indonesian, Applied Linguistics)

In the interview, Sem shared multiple episodes on how this sort of perceived "judgement" by NSE students and lecturers on his English proficiency hindered him from his usual way of participating in interaction. On the other hand, Anik, another NNSE international student from Indonesia, showed a stark contrast with Sem in strategically overcoming linguistic issues. She revealed her affective strategy to cope with potential issues attributable to her imperfect grammar:

I don't know whether it's problematic or not but what I'm trying to do is like I try to say whatever I can say. I mean that my grammar is not, maybe it's not perfect, far from perfect. I don't care about that as long they understand. (Anik, NNSE international student, Indonesian, Finance, Business School)

Anik managed her potential loss of confidence in using English in interaction by focusing on meaning making and transfer, not accurate or appropriate linguistic forms. Sem's sensitivity to the interlocutors' perception about his speech, as well as Anik's strategical use of insensitivity, shows that affective management around speaking English in social interaction also count as part of NNSE international students' linguistic resources.

As shown so far, NNSE international students were found to be experiencing a range of incongruence between their needs and resources when they speak English in educational interaction. They perceived their own interactive behaviours in English as different from those in their L1 and often identified the sources of issues in specific linguistic features of the way they spoke English. Confidence in the use of English in interaction could also be problematic without affective strategies. The shortage of speaking-related resources thus impacts on their participation in educational interaction, either hierarchical or peer. The next section will provide how *domain knowledge resources* influence the participation of students in educational interaction.

## **4.2. Domain Knowledge Resources**

Students' domain knowledge resources are their knowledge relevant to learning subject contents. In the interview data, domain knowledge resources impacted on the way they behave across different learning modes that involve interaction. The resources are subdivided into two types; (1) academic knowledge resources, and (2) personal knowledge resources. This section describes and elaborates on these two themes.

### **4.2.1. Academic knowledge resources**

Academic knowledge resources which students had acquired were identified to influence students' participation in educational interaction. Both NSE/local and NNSE/international students touched on the impact of these resources in their interviews. These resources are considered to afford and constrain the students' understanding of and accordingly contribution to

the ongoing conversation. The following quotes detail the processes of the affordances and constraints.

One NNSE international student in Engineering mentioned the possibility that enough academic subject knowledge could be a major motivator for students to participate in classroom discussions. He recounted how their academic knowledge resources once made him and his friend, who was also an NNSE international student, decide to take initiatives to join in the ongoing conversation occurring between the lecturer and another student so that their knowledge would be usefully shared in the classroom:

Yes, sometimes that's right I also .... sometimes I observed that doing in the classes. So like one, one student would ask question to the lecturer, and then maybe the other student has knowledge about that particular topic, so that person pops in and try to explain to the student. Yeah, yeah, that has happened. And also we had, I can remember, we also had, we also had that experience. You know, you know, first trimester, you know, that was actually Network course. You know, Dr. Lee, he was explaining on the topic, what he called it, uhm, what was the topic, that was event consistency or something like that, that's the topic you also experience. He himself admitted that he couldn't quite understand that topic. So there was the other student who asked a question, and then Bin popped in. Yes. Yes, he, and then, and asked me whether I had also understanding on that particular topic and then I also popped in so we had a discussion between ourselves. (Josh, NNSE international student, Papua New Guinean, Engineering)

In Josh's recount, he and Bin, both NNSE international students, noticed that the lecturer and other students did not have enough domain knowledge, so Josh and Bin moved to share their academic knowledge. The two international students' confidence in their own academic knowledge resources motivated them to participate in the ongoing interaction to contribute to the educational discussion.

On the contrary, self-perceived lack of relevant academic knowledge resources could constrain NNSE international students' participation in interaction. The following quote can be interpreted as addressing how an Indonesian student noticed his relative shortage of academic knowledge resources.

Some of the comments made by my classmate, things that I didn't find before, and then like “wow, they are so smart so I need to adjust myself first”. And sometimes I become too careful and I prefer not to say anything. So that’s the thing. I have to improve myself. So that’s the thing. (Sem, NNSE international student, Indonesian, Applied Linguistics)

Here Sem compared his academic knowledge resources with his classmates’, deciding that his own resources were not sufficient to actively participate in the educational interaction. This negative evaluation of one’s own academic knowledge resources was not exclusive to NNSE/international students but also shared by an NSE/local student. Sonia, an Applied Linguistics student, who came back to the educational program long after accumulating relevant professional experiences, described her own behavioural pattern in educational interaction, which was similar to Sem’s:

Having said that, I think returning to education after 30 years, I still feel, not in disadvantage, that’s not the right word, but I feel I have a huge amount of learn, so I do like to listen to the other students quite a bit before I am ready to participate ..... you know, one of the things that’s been a steep learning curve for me is all the linguistics language, if you like. So the terminology to refer to concepts and to ideas and language features is all new for me ..... So I suppose it’s a little of being careful about, uhm, what I say, in case I look stupid (LAUGHTER) (Sonia, NSE local student, Applied Linguistics)

Here in Sonia’s comment, her attention to her own academic knowledge resources would affect her participative pattern in a negative way, making her careful about participating in interaction. These pieces of evidence show that students’ self-evaluation of their own academic knowledge resources, especially when they are compared with other students’, could be a major impact on their participation in educational interaction. Next, the other type of domain knowledge resources will be shown as another potential influence on students’ participative behaviours in educational interaction.



#### 4.2.2. Personal knowledge resources

As shown in the previous chapter (Chapter 5), in some disciplines, such as MBA and Applied Linguistics, postgraduate students' personal knowledge resources from their previous work experiences were considered to be of educational value so that they were shared among students. There was a strong emphasis in their disciplinary learning on synthesizing their personal knowledge resources with the target academic knowledge. This conceptualization of personal knowledge resources for disciplinary learning often led lecturers to choose active learning modes, such as Interactive Lecture, In-Class and Out-of-Class Collaborative Work, where students can develop their disciplinary learning through interaction.

Students themselves in these disciplines were also found to put significant value on their own personal knowledge and experiences in relation to learning their target academic knowledge. One Business School student, who has prior broad educational experiences across disciplines in his undergraduate studies, expressed his understanding of the nature of MBA education in the following way:

Whereas for the postgraduate studies, although the skill and knowledge level is quite different, depending on how specializing you are, there is more, in general, class talk. Uhm, because the (MBA) program is designed usually to draw on your experience, and how you can use the information to relate to what you do on daily basis. So there is more collaboration opportunities, more, uhm, classroom contributions, compared to undergraduate studies. So for the postgraduate studies, there are significantly more group work, so, whether that's a group presentation, group assignment, group study, I think, a lot more around the group, rather than individual based study. (Mengsu, NNSE local student, MBA, Business School)

Here Mengsu conceived MBA students' experiences and daily activities in their work situations as essential resources for their disciplinary education. He realized that the abundance of collaborative learning in the MBA program was intended to optimize conditions for students to talk more about their own daily practices as managers. Thus, the target academic knowledge can be meaningfully related to their current and future practices in the real world.

In this nature of disciplinary education, a MBA student appreciated the sort of learning mode that would facilitate their linking between academic and personal knowledge resources. She positively evaluated Interactive Lecture Mode as beneficial for her learning, as the quote below illustrates:

For example a lecturer will teach concepts, teach the framework, and then, uhm, the class will give insights on that, and then, that then is also a way of validating the framework. What does the framework, where its weakness is, where its strength is, and that comes from the experience where it's been used before. Or somebody wants to share an experience where that's been in such a situation, where that, that particular topic is, uhm, applies, does that two way kind of direction. That, that does benefit our learning, my learning anyway. So it's not all just sitting back and listening from the lecturer who's just delivering. That way, to us, that is more two way, uhm, that, that, that's, uhm, yeah, I learn a lot from that environment. (Tia, NSE local student, MBA, Business School)

Tia here appreciated interaction opportunities in her MBA classroom contexts as venues where substantial learning could occur to her, and she believed that this learning was realized through rigorous validation of academic knowledge by students, drawing upon their own personal professional experiences.

In Applied Linguistics as well, a local student shared the view of educational benefits of opportunities for students to use their own personal knowledge resources. She emphasized that, due to the nature of her discipline, knowing other, especially international, students' perspectives would be greatly beneficial for the development of her learning:

I think, uhm, for the peer work in the classroom, you know, in the particular MA classroom, for example, of Ian's class. For me, it's hugely important because I can learn as much from the other international students as I can from Ian, you know. Ian provides the theoretical framework but the other international students provide this, you know, invaluable perspective. Many of them are from nations which are really huge in terms of the market for English Language Teaching, so being able to understand, uhm, difficulties they have, the perspective they have, is really big part of, uhm, the learning for me, so that in that case peer collaboration is important. (Sonia, NSE local student, Applied Linguistics)

Thus, international students' personal knowledge was recognized by Sonia as an important source of information that would be disciplinarily relevant and irreplaceable with other resources.

In the student interview data from Engineering, an NSE international student shared the educational benefit of drawing on peers' personal resources:

As long as we have a progress to show on our project, we would show what we are doing. And the professor could give us and other students could give us feedback to help improve our work flow, or so other students could get ideas from each other..... I know it's really good to be subjected to different ideas and different ways of thinking. It makes you more well-rounded person. (George, NSE international students, American, Engineering)

George acknowledged that he greatly appreciated feedback from his peers. Students' personal knowledge and perspectives were thus conceptualized as beneficial resources when they were shared among themselves.

These positive perceptions of using and sharing postgraduate students' personal knowledge resources are highly likely to impact on their creation and utilization of peer interaction. One observation opportunity of an Applied Linguistics classroom actually captured the moment which documents this hypothesis. In the classroom, Sonia, who highly valued personal information from international students in the interview quoted above, moved to initiate Voluntary Type peer interaction in the middle of a conversation between the lecturer and an international student. She joined in and tried to elicit further information from the international student as to what interested her in the ongoing conversation about this international students' home country context.

It should also be noted, however, that some students were hesitant to evaluate the use of personal resources as categorically beneficial in their postgraduate education. Here is a quote with the reserved view on the use of personal knowledge resources for learning purposes:

I think it's depend on the course..... (In one paper), uhm, while discussion is also important but just to clarify our answer. But mostly doesn't really need it. Because the answer of the inside of the paper, it's fairly obvious. I mean, uhm, it's like, uhm, science

thing. So the answer is, if it's A, it must be A. If it's B, it must be B. So no further discussion. So we need to have discussion just to, to clarify our answer. But in another paper, if we talk about, uhm, like, uhm, some micro economic case..... yes, we need discussion, I mean, because we talk many aspect..... Yeah, that's why we need discussion, I mean, we need to see from many angles. (Jerri, NNSE international student, Indonesian, MAF, Business School)

Jerri found that the extent to which students' use and sharing of personal resources could be educationally beneficial might vary across courses with different learning objectives. The first type of learning objective he referred to apparently involved the sort of academic knowledge that would be valued only when they were used or implemented in appropriate and accurate manners. In his second type, on the other hand, the target learning object was open to discussions in the sense that presumably one perspective alone could hardly address its multi-dimensional nature. In any case, this evidence shows that students will conceptualize the educational benefits of their personal knowledge resources depending on the objectives they find in their disciplinary learning. This conceptualization is likely to impact, in turn, on their decision makings on the creation and utilization of peer interaction opportunities in a particular situation. The next section will provide how *social relation resources* influence the participation of students in educational interaction.

#### **4.3. Social relation resources**

Social relation resources are a category for students' social relationship with other students and the lecturers, as well as competencies of making such relationship. Students draw upon the resources in terms of affective conditions under which they could feel their social environment is optimal for their engagement in learning activities. In the interview, students were generally found to appreciate stronger social bonds with other students as optimal conditions for learning.

#### 4.3.1. Resource shortage

International students referred to the lack of social relation resources, especially at the initial stage of their postgraduate education, as a source of problems with their learning conditions. Jerri, an international Business School student, recounted his experience of another postgraduate program (= Honours degree in Finance) which he had finished before he enrolled in the Master of Applied Finance (MAF) program. He pointed out that strong bond had already been established among students in the learning community, as they had shared the study continuum from undergraduate levels to postgraduate level. Jerri then sensed this community bond was exclusive to local students, feeling isolated:

I'm just like an outsider in the class. That also give me, like, uhm, like, what do you call, make me feel bad or less confident. (Jerri, NNSE international student, Indonesian, MAF, Business School)

Another international student from India shared a similar sense of dissociation from the established social bond among other students. He explained his status as a part-time student accounted for the lack of this bond:

I think, I think I'm comfortable with the lecturer just because I don't interact a lot of the students. And the reason is, since I work full time, I don't spend a lot of time in the university, so probably that's one reason. So I don't have a lot of connections of friends in the university. (Nathan, NNSE international student, Indian, Engineering)

Nathan here explained that he preferred interaction with the lecturer rather than peer interaction and that was due to his perceived lack of social bond with other students. Another international engineering student, Josh, also shared the awareness that social relation resources could impact on participative behaviours in classroom interaction. He noticed that there was a behavioural difference between international students and local NS students in interaction and that it stemmed from belonging to the established social bond:

They do not very often, but, you know, they talk like, maybe because they know each other for a while or something like that.... Most of the time, (*unrecognizable*), we just

sitting listen because I think maybe they have known each other. (Josh, NNSE international student, Papua New Guinean, Engineering)

This perceived dissociation from the established social bond among local students was partly to do with the institutional mechanism. As Jerri and Josh mentioned, local students might know each other from their previous programs or courses, while international students, as newly enrolled students, did not have such acquaintance.

#### **4.3.2. Development of social relation resources**

Importantly, this sense of isolation on the part of international students would usually dissipate over time as the students got accustomed to their new environments. Johnson, an international student from India, expressed the feeling of comfort he felt in terms of his newly-established social relation resources:

Now that, you know, we know each of our peers and the lecturer..... we are kind of comfortable. (Johnson, NNSE international student, Indian, Engineering)

Another international student noticed his own change in behaviour in the classroom over the course of time as his new social bond formed. Here he said that he finally was able to join into the classroom interaction after he established an intimate acquaintance with other students:

I did it like one time in Trimester Two, I think, like, after six month or (*unintelligible*) but for the first six month, I never did that because, first, I didn't really know them. (Jerri, NNSE international student, Indonesian, MAF, Business School)

This process of social bond makings for international students would seem to be triggered by certain conditions. For example, new international students, who had not yet formed a bond with local students especially at the initial stage of their studies, tended to develop social relation resources among themselves, outside of the already-established community. Nicholas, a Spanish engineering student, expressed this mutual attachment with Johnson, an international student from India, who became a good conversation partner for him:

I am a friend of Johnson. That's good, yeah. Because we are international students, we are like more close, have that same situation, so we talk more often. (Nicholas, NNSE international student, Spanish, Engineering)

Also, there was found to be a condition under which the attachment among students would naturally develop because of the small population of enrolled students in a program. Isaac, a Chinese MPE student, explained here how the MPE student established their social relation resources in their program:

I think the reason why is, there are not so many people in this program. And the, yeah, it's true, but at a lot of time we will get together, discuss about our assignment or other things, so actually we have peer work, but not it created by lecturer. We will create it individually. (Isaac, NNSE international student, Chinese, MPE, Business School)

Isaac said that the social bond of this small community was so strong that their social relation resources generated physical settings in which peer interaction would actively occur for the students to be able to mutually develop their own learning.

In MBA, the benefits of collaborative learning outside of classes were institutionally perceived and utilized for a range of purposes. Every student was supposed to belong to a semi-permanent study group formed on the results of the questionnaires they filled in on their program orientation day. Over the course of sixteen months to two and a half years, the students would establish and maintain the strong relationship among themselves through various educational activities in and outside of the classes assigned by course lecturers and the program coordinator.

An MBA student explained how the strong relationship would activate interaction among students and how beneficial that could be for their learning.

So it's you, me, another three, and we are, so we get to know each other and, and, and, and we start to, maybe the first or second class they might be a bit careful, you know, but after a year or after two, it's "I know you. I know your strength, your weaknesses. You know my strength, my weaknesses", you know, and we can talk more freely (*unintelligible*), get very very good group work as we get together. (Antonio, NNSE local student, MBA, Business School)

Antonio perceived the quality of group learning to be developing over time during his program, as their social relation resources facilitated their collaborative learning.

The social bond as resources could also be developed in the extracurricular activities. Students were found to voluntarily set up the conditions outside of the academic learning activities where social bonds could be nurtured and corroborated in stress-free settings. Jerri, an Indonesian MAF student, described his experience of beer-drinking gatherings with other local students:

And also, uhm, because, uhm, this year, uhm, I enrol to several finance program and most the student are, I already worked ..... So even if they Kiwis, it's easy to mingle with them because, like, after the class, usually, easy, they, they find us to, like, "let's go to", like, uhm, "have some coffee or go to bar, have some beer together." "Yeah." (Jerri, NNSE international student, Indonesian, MAF, Business School)

These social activities, over time, would seemed to help Jerri nurture his own social relation resources around him. As observed in class, he was found to be actively creating and utilizing interaction opportunities with other students, international or local, in a range of learning modes. The social relation resources he developed over time could be interpreted to account in part for his observed activeness in educational interaction.

Many student interviewees thus found social bonds among students significant as resources that could afford and constrain the creation and utilization of peer interaction opportunities in their postgraduate learning. The dissociation from the established social bond among students impacted the way they participated in interaction in the educational contexts, whereas interaction would seem to be more activated once they established their own social relation resources via various channels available. The next section will provide how *learning resources* influence the participation of students in educational interaction

#### **4.4. Learning resources**

Learning resources are a construct for students' repertoire of actions in educational interaction, such as questioning and commenting, for developing domain knowledge resources.



Learning resources are to be drawn upon when students engage in different learning modes, learning objectives, and learning strategies in educational situations. Learning resources as a category typically emerged when the student interviewees mentioned some sorts of incongruence between the perceived needs and resources in postgraduate learning contexts or reviewed what they usually did in comparison with what they observed other students doing. Especially international students noticed that learning resources commonly used by local students in the NZ educational practices were unfamiliar to them and that they needed to develop a different set of learning resources from the ones they had acquired through their previous learning experiences in their home countries. The creation and utilization of peer interaction opportunities for learning is greatly influenced by students' existent learning resources.

As found and discussed in the previous chapters (Chapter 4 and 5), the educational nature of postgraduate learning can generally be described as active learning practice, in terms of learning modes in which students are expected to be actively involved in interaction with the lecturer and their peers to develop their own learning, rather than passively receiving the target academic information (Chapter 4). A range of contextual and personal factors were found to afford and constrain lecturers' choices of learning modes, holistically making the postgraduate education the active learning practice that it is (Chapter 5). Beside this lecturer's side of contribution to making an active learning environment, local postgraduate students also took initiatives to behave as expected in this learning culture as well as negotiate given learning modes to create and utilize interaction opportunities (Section 2. in this chapter). These pieces of evidence collectively show that in the educational practices in NZ contexts, local postgraduate students are expected to be, and generally are, equipped with learning resources for proactively creating and utilizing learning conditions in the forms of hierarchical as well as peer interaction. This set of learning resources is here constructed as *active learning resources*, which will be detailed in the next section.

#### **4.4.1. Active learning resources**

Active learning resources are the resources that students can draw upon to behave as the kind of learner that is expected in the active learning practice. These resources are instrumental

for meeting different needs and expectations in postgraduate educational practices, as opposed to the type of educational practice which focuses on students' receiving academic information and getting assessed in terms of accurate acquisition of information. As will be shown in the following sub-sections, international students especially from Asian educational backgrounds tended to be aware of their own shortage of the resources.

Based on the categories found in the student interview data, active learning resources consist of three general components; (1) active knowledge reception resources, (2) active knowledge use resources, and (3) activity management resources. The following subsections detail each of these three components in turn.

#### 4.4.1.1. Active knowledge reception resources

As suggested in the previous chapter (Chapter 5) and this chapter so far, postgraduate learning activities contain, as an essential element, receiving domain knowledge from the lecturer and other students in a range of learning modes, such as Lecture Mode, Interactive Lecture Mode, Presentation Task Mode, and In-Class and Out-of-Class Collaborative Task Modes. *Active knowledge reception resources* are the resources that students draw upon when they take some interactive action to show their supports to speakers or solve emergent problems while they are receiving information from the lecturer and other students. These resources were utilized in various forms including asking questions and adding and editing information.

##### (a) Asking questions

An Indian international student pointed out the way postgraduate students actively asked questions in his classrooms in any learning mode:

In here I found you can, in postgraduate study, I found it was quite, you can ask questions at any points and it was more casual you know. (Nathan, NNSE international student, Indian, Engineering)

In this quote he implied that this practice was distinct from what he experienced in his home country context, where students would not be expected to ask questions even at points when they felt they needed to do so.

Other Asian students also suggested their practice of *not* taking active steps for emergent questions while receiving information. They shared the perspective that in their home country contexts, students would not proactively ask teachers questions to solve problems but concentrate on individually receiving academic information the teacher provided. Mengsu, NNSE local student, who claimed to the double status as Asian and Kiwi, succinctly summarized Asian learning behaviours in classrooms:

The teacher asks you a question and you answer. This is the Asian platform. (Mengsu, NNSE local student, Chinese, MBA, Business School)

Nadia, from Thailand, seemed to agree with Mengsu from her view of general passiveness of Asian students, which can be interpreted to include *not* asking questions:

In Thai school, we don't usually speak up. Everyone just silent. We only answer when we are asked to answer. (Nadia, NNSE international student, Thai, MBA, Business School)

These observations indicated that NNSE international students from Asian countries might generally have so limited experiences of proactively asking questions in Lecture Mode that they tended to be short of active learning resources expected in the NZ postgraduate practice.

#### (b) Adding and editing information

One local student mentioned the way students could help improve the contents of their peers' ongoing presentations while receiving information. He said postgraduate students would actively add information they felt needed to be addressed:

Also a lot of time, if there is something that they are not sort of bringing out you think is important, yeah, I think we can just jump in and say "hey there's this point that you're not really.... what about this?" (Brian, NSE local student, Engineering)

Brian described here how students would monitor the contents of their peer's presentation while receiving information and take actions to address what they felt missing and needed. While Brian specifically talked about students' adding information for their peers in Presentation Task Mode, Bin, a Vietnamese international, also identified a similar type of contribution in Lecture Mode. He explained how NSE/local students could actively add information to what the lecturers provided:

So sometime, it's not just about answering the question. They (= NSE or local students) can talk something in addition to the point the lecturers are talking about. We [= NNSE international students] are more passive. You know, they try to add some information to that point, but I see, like me and other students never try to add something to the lecturers. (Bin, NNSE international student, Vietnamese, Engineering)

From Bin's observations, NSE/local students were well equipped with active learning resources to contribute to the classroom learning, actively adding new information to what the lecturer set up, while NNSE international students tended not to behave that way. Bin implied this relative passiveness of international students in contributing additional information was culturally driven.

Another dimension of actively receiving academic knowledge in the classroom was that students would participate in editing, or correcting, incorrect information. An NNSE local student from MBA recounted briefly what he experienced in one class:

I can remember in Oliver's class, I think he made a mistake and we actually, you know, we said, "oh this is a, you know, maybe you made a mistake." (Mengsu, NNSE local student, MBA, Business School)

Mengsu depicted how the students identified a mistake made by the lecturer (Oliver) in his lecture and they immediately tried to take care of it. Students were thus monitoring their knowledge reception processes in Lecture Mode and taking proactive measures to edit incorrect information when it came about. As will be shown in Chapter 7, postgraduate students who are active learners also take the same action to edit incorrect information given by their peers.

As shown above, actions to ask questions and add/edit information in the knowledge reception processes can be captured as signs of students' active involvement in their own

knowledge/skill development, which is likely to be commonly observed in the NZ postgraduate contexts. Active knowledge reception resources can be very instrumental for students to optimize learning conditions for their own knowledge development.

#### 4.4.1.2. Active knowledge use resources

Alongside actively receiving domain knowledge, postgraduate students are also expected to take initiatives to talk in various learning modes, using their domain knowledge. *Active knowledge use resources* address these needs in the active learning context.

Active knowledge use resources can vary depending on the nature of a task in a given situation. International students' interview data are informative of how various these resources can be. Comparing their previous educational experiences and the educational practice in NZ, international students noticed that they are required to engage in actively using domain knowledge in various forms of higher cognitive function here in NZ. Sem, an Indonesian student, pointed out that postgraduate students in his current program were expected to engage in doing 'analyses', rather than solely receiving knowledge from the lecturer:

But here, you have to prepare yourself as a student, and you have to read, you have to understand, and you have to analyse. This thing is different. (Sem, NNSE international student, Indonesian, Applied Linguistics)

This perception of differences in learning objectives between two educational practices was shared by other international students. One of them explained why she tended to be silent at the initial stage of her postgraduate learning in New Zealand:

Chinese people seldom get encouraged to think independently. So we don't have opinion about the topic. That's the first thing I thought in the class. 'Cause in the first several classes, I don't know what to say. 'Cause I don't have to opinion in my head. We just listen to the teacher, and we are seldom asked to think about something by ourselves..... We were never examined about our opinions in exams..... maybe in Chinese, I cannot say to talk a lot. I think it's not my language, 'cause I really don't have any opinion. (Amy, NNSE international student, Chinese, Applied Linguistics)

In Amy's description, the undergraduate learning objective she experienced in China was strongly oriented towards the reception of what the lecturer provided, not the active use of given knowledge in terms of students themselves having an "opinion".

Another international student from Taiwan similarly attributed to her original cultural context her unfamiliarity with what she identified as "think critically":

I'm not a critical person. I think, like, Grace and those people who ask question, they are, they tend to think more critically than me because I don't, ah, usually I just think like, that's no really, I don't evaluate something, like good or bad, so I cannot think critically really well. So usually I just receive and I don't give any, I don't ask any question until I know more.... (Ruby, NNSE international student, Taiwanese, Applied Linguistics)

With her implicit definition of critical thinking, Ruby explained that she was not accustomed to this higher thinking as a postgraduate learning objective. In the next quote, she explained that her inability to think critically was attributable to her previous educational experiences:

And also in my undergraduate training, I'm not trained to think critically even it's, ah, ah, I think it's about nearly end of the, it's a higher education, but they don't train you to think critically. The most critical assignment I have got, it's "compare and contrast", I still remember. Mostly they just want you to describe something, and then you talk about your opinion, but you are not, when you judge something too critically, the lecturer was saying "is that true?" "Is that just your opinion?" they will, they will debate you should not, they should, they will decrease your, just try to depress your critical, they don't want you to think that way.

Similarly to Amy, who was initially confused by the expectation to have an opinion in her postgraduate studies, Ruby was currently experiencing incongruity between what she felt she needed in postgraduate learning and the resources she had gained through her training at undergraduate studies. Critical thinking was an unfamiliar learning objective to her, as undergraduate students in Taiwan were not encouraged, if not discouraged in her view, to develop their critical skills.

In summary, international students with different educational backgrounds tended to feel unfamiliar, especially at initial stages, with what they are expected to do in their postgraduate

studies. They described the perceived nature of learning objectives at postgraduate study, such as making analyses, having opinions, and critically thinking, as being new to them, and expressed uneasiness around doing these learning activities. Doing these activities, students are actively using the target academic knowledge and personal knowledge resources by themselves, as opposed to receiving relevant information in a passive way. In this sense, those international students were under-equipped with *active knowledge use resources* due to their previous educational practices. This resource shortage was highly likely to impact on their participation in peer interaction.

#### 4.4.1.3. Activity management resources

Active learning resources address not only actual learning processes such as using and receiving relevant information in various learning modes but also managing processes such as setting up and maintaining optimal conditions of learning modes. This aspect of active learning resources is termed *activity management resources* in the current framework. For example, Out-of-Class Collaborative Task Mode requires students to manage their own activities on their own to a large extent. While many aspects of the learning activity management in class, such as the choice of learning modes, allocation of speech rights, and time management, are basically taken care of by the lecturer who is in charge of the particular class, in Out-of-Class Collaborative Task Mode, students are supposed to manage these learning conditions without a great deal of involvement from the lecturer. Students may set up meetings and agendas while deciding on a range of conditions, divide work load, and develop and evaluate production processes and final products. To be able to engage effectively in these various aspects of collaborative endeavours, students are expected to develop activity management resources.

The student interview analysis found three sub-categories related to actual use of activity management resources. They are work load, speech right, and time allocation. These categories basically involve the management of equality in collaborative work. Data shows how this aspect of activity management can often be problematic not only for NNSE/international students but also for NSE/local students who are supposed to be equipped with other active learning resources, namely, active knowledge reception and active knowledge use. The following sub-

sections provide evidence of how these resources could impact on students' participation in interaction.

(a) Management of equality in work load, speech right, and time allocation

Being able to implement equal amount of work load was identified by the students as an important skill for the management of active and collaborative learning. A local student recounted his problematic experience with a project colleague who would not take up a fair share of work load:

I certainly had issues in our last team project. I mean, I had an issue with sort of imbalance in the amount of work you want to put into it. Two of the team mates I was with were really good. They kind of worked on it better and helped out. It's not things. But the other one, he sort of did, he only wanna do the smallest amount of work possible. (Brian, NSE local student, Engineering)

Brian's frustration here implies that a sense of fairness is assumed to be shared among students who get involved in collaborative work. This sense of fairness can go further to the quality of work. One Engineering student pointed out unequal competence among students:

Yeah there's always issues, the same issues I've always observed, and that sometimes one person can't do the work well enough. (George, NSE international student, American, Engineering)

The sense of equality also covers decision-making processes in collaborative work. One International student expressed issues she found in the form of lack of equal speech rights or opportunities:

Sometimes in peer interaction one like to take a lead so strong so we don't have this person forget to release the control to other students. Yeah, so in the peer interaction, we don't have much chance to talk, yeah. (Jasmine, NNSE international student, Taiwanese, Applied Linguistics)



Issues due to the lack of these activity management resources also came up regarding poor time management. George, an Engineering student, described a likely scenario of a member of collaborative project not properly doing his share of work within given time constraints:

Maybe there is somebody who has real life issues coming up and they are procrastinating or not doing things that they need to be doing. (George, NSE international student, American, Engineering)

George assumed that each of project members should equally manage their own work load within an agreed time constraint, and that lack of proper management of one's own learning activity would cause issues to other members in this learning mode. Participation in collaborative work would thus naturally involve social responsibility to other members of a project. Skills around this management of work load and time can be captured as an essential resource for collaborative learning.

#### (b) Development of activity management resources as a learning objective

Students noticed the identified issues with activity management could happen in the real world work environments and captured the development of activity management resources as part of their learning objectives. George, from Engineering, noticed that skill development for settling social issues is a beneficial educational goal:

And then when it comes to integrating work, uhm, in any group, there can be conflicts with one person not being happy about another person's work. And I think resolving those things just comes from years of experience of doing group projects, which is why also it's good building conflict resolution skills. (George, NSE international student, American, Engineering)

Mengsu from MBA, who perceived the development of activity management resources to be essential parts of his program, was also found to have a pragmatic perspective of issues around collaborative learning. In the context of talking about unequal work load among students in team work, the student showed his realistic perspective of unfairness:

It's a just the reality. I don't think it's ever be fair but that, that's just what the reality is.  
(Mengsu, NNSE local student, MBA, Business School)

However different their views are, George and Mengsu were each already equipped with activity management resources enough to address social issues around collaborative learning to some degree. They were well aware of tricky aspects of collaborative learning and had established their own perspectives of potential issues while actively engaging in collaborative learning. These awareness and perspectives would be instrumental to manage their learning activity together with their peers among themselves.

#### **4.4.2. Intercultural learning resources**

As has been shown so far in this chapter, international students generally grasped the differences between their current postgraduate and previous learnings in terms of various aspects of educational practices, including learning modes, learning objectives, and students' expected activeness. Their perceptions of the postgraduate educational practices and incongruence between expectations in the practices and their own resources has given the current research enough evidence to help model the type of resources that will be expected of students in the active learning practice of postgraduate education.

In this section, analytical attention is shifted, away from what local postgraduate students are generally thought to be equipped with, towards what international postgraduate students need to draw upon so that they can overcome their perceived resource shortage and acquire the expected active learning resources. These resources to be drawn upon in this socialization process are collectively constructed as *intercultural learning resources* here and incorporated as a constituent category into *learning resources*.

Two sub-categories were identified for intercultural learning resources. The first one, *control of one's own culturally bound resources*, is international students' competence to manage and control their own culturally bound learning resources, which could potentially impact negatively on their behaviours in the new educational environment. The second category is *appropriation of new cultural tendencies*, which is international students' competence to

appropriate the socio-cultural motivations as resources that could facilitate their socialization into the new educational environment. These two categories will be detailed in the following sub-sections.

#### 4.4.2.1. Control of one's own culturally bound tendencies

As we have already seen in this section, the NNSE/international students in this study showed keen awareness of differences between their own and local students' behaviours in educational interaction, including peer interaction. The analysis of their interview data revealed that they had brought to their new environments a range of behavioural mechanisms as their *previous* learning resources, which were thought to be instrumental and essential in their previous educational practices. It was also found that these underlying behavioural mechanisms tended to be unhelpful in the new environment and often even negatively impacted on their participation in educational interaction in the active learning practice. Control of these culturally driven behaviors would become valuable resources for international students in their acquisition of a new set of learning resources.

Three major cultural mechanisms, *speech right sensitivity*, and *underperformance sensitivity*, and *conflict avoidance* were factors that were perceived by students themselves to have major impacts on their participation in the educational practice in their new educational settings. The following sub-sections will address these cultural mechanisms in turn.

##### (a) Speech right sensitivity

International students, especially from Asian countries, expressed their general sensitivity to who should talk and what should be talked about in educational contexts. Three sub-categories were found in this major category, which are *hierarchy sensitivity*, *intrusion avoidance*, and *initiative reservation*.

In terms of *hierarchy sensitivity*, Asian international students in this study emphasized the authoritative role teachers were supposed to play in their previous learning contexts. This

keen attention to the role differences transferred to the new educational environment and affected the way they interacted with the lecturers as well. One Indonesian student attributed this behaviour to ‘Confucius’ moral codes, which are known to be widely spread across South- and North-eastern regions in Asia:

I think because we are Asian people, Confucian.... it’s like, give some respect to your lecturer, I don’t know, keep respect or honours or something, but there is some distance between the lecturer. (Anik, NNSE international student, Indonesian, MPE, Business School)

This valued hierarchical distance mediated by “respect” was shared by a Chinese Applied Linguistics student:

In China, we, most of the students, they are afraid of teachers so they speak they talk with teacher with fear..... and here if I can, if I speak to the lecturer, I will also speak them with fear..... with lecturer, I always think about hierarchy. I need to respect them. I need to, yeah, respect. (Amy, NNSE international student, Mainland Chinese, Applied Linguistics)

Here Amy expressed her mixed feeling of fear and respect towards the lecturers in her Confucian tradition. It is understandable that this psychological distance between the lecturers and students would generally constitute a barrier that could impede students from active involvement in interaction with and in front of the lecturer. Amy described, for example, how Chinese students would refrain from being openly critical about what the teachers had to say.

In China we never challenge the teacher about professional issues. The teacher is the most professional ones.... We cannot challenge the teacher, so we don’t have different opinions from the teacher. (Amy, NNSE international student, Mainland Chinese, Applied Linguistics)

In this case, the teachers’ perspectives were likely to be accepted as authoritative knowledge and it would be natural for students to deny themselves opportunities to question them and demonstrate their own personal views. On a similar note, students would never give themselves a thought of trying to correct wrong information, according to Bin, even when it was apparent that some mishaps occurred on the lecturer’s part in Lecture Mode:

Even we know that lecturers say something wrong, we just keep it..... We never say it, we never say it, you know, in front of the class, to the lecturer, that, “dude, you are wrong.” (Bin, NNSE international student, Vietnamese, Engineering)

Socio-culturally inherited sensitivity to hierarchy would thus impact on international students’ classroom behaviours and hinder active learning. They would deny themselves opportunities to actively question and edit incorrect information during the classroom information transfer. These psychological barriers would have to be controlled for the acquisition of active learning resources.

*Intrusion avoidance*, another cultural mechanism related to speech right, was also found in the student interview as a factor that might negatively affect the development of active classroom discussions. When asked about Voluntary Type Peer Interaction, in which students will actively open up interaction among themselves in a classroom discussion, an international Engineering student briefly touched on a gap between Asian international students and local students in the creation of Voluntary Type peer interaction:

Most of the time, local students do that. (Josh, NNSE international student, Papua New Guinean, Engineering)

Interviews with other NNSE international students revealed that it was believed that the action of joining into the conversation between a student and the lecturer to open up Voluntary Type Peer Interaction, would be intrusive and rude. Here are three quotes sharing the same perspective of joining into the conversation as an intrusion:

I would find it rude if I disturb somebody’s conversation, right. I think that’s how we’ve been brought up, like, I mean, for me anyway, that if someone, if there’s two of us talking, someone else, I mean, somebody barge in and stop what we are saying, I think, you know, that’s, I, I would think that it’s quite rude. (Nadia, NNSE international student, Thai, MBA, Business School)

Culture. Because when two people are talking we are taught not to jump into the conversation. Yeah, it’s not polite, also for Chinese it’s so impolite to say when two people are talking and just jump in and express yourself. It’s rude. To me it’s pretty

awkward as well. (Grace, NNSE international student, Hong Kongese, Applied Linguistics)

I guess it can go back to cultural differences. I was told to listen till someone finish their talk, other than interruption. (Jasmine, NNSE international student, Taiwanese, Applied Linguistics)

These observations seemed to have a consensus that, largely in some Asian contexts, interactional behaviour is culturally constrained in terms of speech rights. Later participation in the on-going two-person discussion would be severely restricted, with others required to be patient listeners. From this view, Voluntary Type Peer Interaction would be discouraged due to its potential breach of the moral code. This cultural mechanism needs to be overcome if international students would like to acquire and use active learning resources to be fully functional in the postgraduate educational practices in NZ.

In terms of *initiative reservation*, the last sub-category of speech right sensitivity, Asian students were also found to be aware of their own habitual reservation for taking initiatives in creating or participating in interaction. Ruby, a Taiwanese student, described her cultural behaviour in interaction modes as follows:

We tend to talk less, someone has to talk, talk more. (Ruby, NNSE international student, Taiwanese, Applied Linguistics)

This brief quote indicates that Taiwanese students might be generally hesitant to take initiatives in interaction, trying to be reserved as a speaker. This general hesitation for initiatives was elaborated on by another Chinese student from Hong Kong:

From my experience in, uhm, let's say, talking back when it's case study and group discussion and in, uhm, in, uhm, business course, because most of my classmates, they are, uhm, they are Hong Kong, they are locals, and when it comes to the discussion, "oh so here's a question", and everyone go silent, and then "ah, wait, who would be talking first?", you know [LAUGHTER], waiting for somebody to come up with the first word.....and when it comes to reporting or reporting back to the class, then everyone was just, "maybe you, maybe you." (Grace, NNSE international student, Hong Kongese, Applied Linguistics)

Here Grace described the typical scenario of how Hong Kongese students would try to avoid any initiative role in educational interaction, ending up having inactive discussions.

Overall, these three behavioural mechanisms related to speech rights are unlikely to be instrumental in participating in active learning in postgraduate contexts. Rather, these socio-cultural behaviours, however meaningful in Asian educational contexts they might be, would negatively impact in postgraduate contexts in NZ. With those behavioural mechanisms remaining, learning opportunities would be greatly reduced especially in the situations where students are supposed to actively exchange their knowledge and perspectives for learning. International students are required to develop their *intercultural learning resources* to contain a direct impact of these behavioural mechanisms on their learning in the new educational environment.

#### (b) Underperformance sensitivity

International students from Asian countries explained how they were inclined to avoid making mistakes in interactive settings. One student pointed out that this was due to their previous educational experiences, in which teachers would correct their students' mistakes on the spot in the classroom.

In my country if we say something wrong, teacher will tell us that it's wrong. They correct us right away. (Jasmine, NNSE international student, Taiwanese, Applied Linguistics)

Another student conceptualized the avoidance of making mistakes more broadly as their cultural trait, rather than as their educational practice:

We have the culture that we don't wanna look kind of stupid, like, we wanna say something as meaningful. (Jerri, NNSE international student, Indonesian, MAF, Business School)

This orientation towards correct and meaningful utterances in interaction would constrain behaviours on the part of students in educational interaction. A Thai student explained how

Asian students tended to become less interactive in educational contexts because of this psychological mechanism:

Like, if you ask an Asian students, they don't answer, right? They just keep quiet, because they are afraid that, "hey, we are gonna give a wrong answer, we're gonna be really embarrassed". When in Asia, like, it's, it's very different. I think we always afraid of right or wrong. (Nadia, NNSE international student, MBA, Business School)

Nadia went further to describe her way of participating in educational interaction in her MBA studies:

For me, it's just, I mean, I do interact. I do participate, but only when I have something good to say. Like, I don't wanna simply say just because I wanna have my input, I think, that's a difference, uhm, between me and many other, you know. Other students say something very valuable as well, but for me, like, I, I really have, I think a lot before I wanna say something. (Nadia, NNSE international student, MBA, Business School)

Rather than being totally silent in interaction, she said she would usually limit her contribution in educational conversations to 'something good to say' or 'something very valuable'. Nadia's characterization of her own behaviour in comparison with other students implies that, in her view, some students tended to be relaxed in terms of the value of contributions they would make. A Taiwanese student also touched on the quality of contributions by local students in terms of relevance:

They are competent to say what they want to say, to express themselves. It seems that they are comfortable to say something, not, sometimes, not really related to the topic. (Jasmine, NNSE international student, Applied Linguistics)

Another Asian student was more explicit in criticizing the way local students would make generous contributions.

For my own opinion, you know, it's like you wanna say something but just for the sake of saying something. I think that's why Asians are so aware that, you know. (Jerri, NNSE international student, Indonesian, MAF, Business School)



Jerri implies here that his criticism of “saying for the sake of saying” stemmed from his socio-culturally nurtured view of what should be talked about in educational contexts.

Collectively, these Asian student interviewees seemingly share the view that utterances in educational interaction should be made to ensure that they would be correct, valuable, relevant, and meaningful, and that underperformance due to inattention to these criteria will naturally be disapproved. This educational perspective is likely to contribute to generating and regenerating the practice of scrutinizing the quality of discussions against the criteria, but the view might also run a massive risk of discouraging active trial-and-error attempts to solve problems, ending up in a hesitation to participate as actively in interaction as was expected in the active learning practice.

#### (c) Conflict avoidance

The last cultural mechanism found in the student interview that could impede active participation in educational interaction is international students’ tendency to avoid direct conflict in oral communication. One Chinese student held a view that it is the Asian tendency to avoid any conflict that will constrain the way of participation in educational interaction in Asian contexts:

I won’t tell my classmates (Asian students) that I don’t agree on his or her opinions directly. I believe this is common in Asian culture (Chinese, Japanese, Korean, even Indonesian). (Xuekun, NNSE international student, Mainland Chinese, MPE, Business School)

Xuekun assumed here that Asian students did actually have their own opinions but that they tended to avoid showing their disagreement among themselves. A similar observation was shared by Grace, from Hong Kong, when she described her fellow Hong Kongese students’ tendency to develop discussions without indicating any potential conflict between them:

Others were just like “uhm, yeah, yeah, good idea”, but then somebody, if somebody holds another point of view and they, that person will come up by saying, “ah maybe, uhm, this and this and this”, he will just state what he believe or what he thinks, and the

others were, “ah, ah, ah, yeah.” (Grace, NNSE international student, Hong Kongese, Applied Linguistics)

In this particular pattern of discourse development, potentially conflicting positions could be juxtaposed without any clear indicator of collision. Every position would be acknowledged by collective backchannels from listeners with no critical evaluation. Thus, each position could at the surface level avoid opposing and being opposed by each other.

This cultural tendency to avoid conflict, if transferred intact, might hinder some learning objectives, such as critical evaluation, from being as effectively pursued as they are intended to be (see Chapter 5, Section 3 for how the lecturers set up active learning modes to help students develop critical thinking as a learning objective). International students who tend to avoid conflicts might then have difficulty in developing active learning resources, including actively using their own personal perspective and challenging different perspectives. To overcome this culturally instilled mechanism, intercultural learning resources should be nurtured. Noticing their own tendency to avoid conflicts will be a first step towards this resource development for international students.

So far in this section, three types of culturally bound psychological mechanisms that international students tend to bring over from their previous educational practices to the new learning environment have been described. They are *speech right sensitivity*, *underperformance sensitivity*, and *conflict avoidance*. Since these mechanisms are considered to be unhelpful and often negatively working in the active learning practice of postgraduate education, international students are likely to address these innate tendencies. Their competence to manage and control their cultural psychological mechanism in learning contexts has been presented as one pillar of Intercultural learning resources. The next section will describe the other pillar of Intercultural learning resources, which involves how international students can notice and appropriate the characteristic cultural psychology of the new environment to acquire a new set of learning resources.

#### 4.4.2.2. Appropriation of new cultural tendencies

International students were found to have noticed general behavioural tendencies in the current postgraduate contexts, which they had not experienced in their previous learning contexts. Once noticed and appropriated, these prevailing psychologies could be instrumental to neutralize the potentially negative influences of the previous learning resources. Three categories were identified as cultural tendencies of the NZ learning contexts which international students noticed. They are; *informality and egalitarianism*, *safety for trial and errors*, and *confrontation dodging*. These three cultural tendencies would respectively correspond in function to the three previous constraining mechanisms mentioned in the previous section (4.4.2.1.), which are *speech right sensitivity*, *underperformance sensitivity*, and *conflict avoidance*.

##### (a) Informality and egalitarianism

The informal nature of NZ learning culture was identified by international students in many different ways. For instance, they took the practice of calling without an honorific as a sign of informality:

So we address the, uhm, lecturer by first name. He addresses us by first name. (Nathan, NNSE Student, Indian, Engineering)

When I just arrived here, it's hard when I met with my lecturer. I will call him Professor. And they just told me that "never never call me that. Just call me name." (Nicholas, NNSE international student, Spanish, Engineering)

As another characteristic feature of the NZ learning culture, an NNSE local student and an international students similarly described the way students could casually initiate interaction in class whenever needs arose:

In fact, in, in New Zealand, you don't even need to put your hand up. You can just ask in some classes. You can just ask. (Mengsu, NNSE local student, Chinese, MBA, Business School)

They usually don't raise their hands. They just jump in conversation and start talking.  
(Bin, NNSE international student, Vietnamese, Engineering)

Without permissions from the lecturer, students can take initiatives to create Interactive Lecture Mode by asking a question or Voluntary Type Peer Interaction Mode by joining in the ongoing conversation.

Students' cracking jokes in the class hour was also received as a sign of the relaxed and informal atmosphere by a European international student:

But I see that here they are very confident with professor. So they even do jokes. They are more closer, but closer to professor. (Nicholas, NNSE international student, Spanish, Engineering)

This informality in the classroom was also captured as the realization of an equal relationship between the lecturer and students. A Vietnamese international student evaluated egalitarianism in the NZ educational practice as an accommodating environment for learning:

I think there is a lot of positive culture in that. There is equality in the class between the student and lecturers. You know that very good thing. That can have the student to be more confident to talk with the lecturers, and I see that when we point out that lecturers make some mistake or, you know, some wrong opinion, it's all right. There is no embarrassment to lecturers. So we are quite open and confident to talk any topics and any ideas with the lecturers..... if the class freedom and open, so we talk with lecturer in the same way we talk with our friends. (Bin, NNSE international student, Vietnamese, Engineering)

Bin took an example of students being able to openly correct the lecturer's mistake to show how this educational environment was barrier-free. The same line of argumentation also came from a NNSE local student:

We don't see the lecturer as, uhm, as above us. He is there to facilitate our learning. He is a subject matter expert but at the same time we still question, you know. (Mengsu, NNSE local student, Chinese, MBA, Business School)

In this case as well, Mengsu assumed non-hierarchical relationship between the lecturer and students in the NZ educational culture. Rather than having an authoritative status, the lecturer would play a facilitator role in this educational environment, which implies that students were supposed to assume an active agent role in their own learning. The egalitarian-principled practice would back up active learning in this way.

One international student succinctly shared the whole process of her noticing and appropriating new cultural tendencies to become an active learner:

What I found here is like, the Kiwis and Kiwi students and Kiwi lecturers, they are like, there's no distance between them in term of talking. So I start to learn from them. It's like, OK, I can, I mean, I can speak like the way they do. (Anik, NNSE international student, Indonesian, Finance, Business School)

Anik here showed that she noticed and appropriated the egalitarian tendency of NZ learning practice and start developing a new set of learning resources, namely, that she actually drew upon her intercultural learning resources to develop active learning resources.

#### (b) Safety for trial and errors

As shown in 4.4.2.1., international students from Asian countries had fear of underperformance and tendencies to try to make correct answers and good comments. This cultural mechanism was thought to demotivate their active engagement in problem solving and hypothesis testing in interactive learning modes. Two of the international student interviewees, however, noticed a characteristic element of NZ learning culture that could help neutralize their sensitivity to underperformance. A Vietnamese engineering student understood the element as follows:

In New Zealand, there's culture, it's not New Zealand only but other Western countries, there is no stupid questions. So when you ask the questions, nobody laugh at it, or say that "why need to ask this?" (Bin, NNSE international student, Vietnamese, Engineering)

In Bin's conceptualization, Western educational practices are oriented towards student-centred knowledge construction, accommodating any need students might feel in their learning processes. He seemingly drew upon his conceptualization of this accommodating motivation as intercultural learning resources. Another international student referred to the lecturer's way of correcting students' mistakes as opposed to the practice that she experienced in her previous studies:

But in the classroom here, sometimes I feel like I say some points stupid but the lecturer will not directly point it out or say, "oh no, this is not right." They will just say (*unrecognizable*) "oh, maybe you can think in that way", or he will ask some other question that make me feel like "oh, maybe this is not the way to think about this issue. Maybe I should try to think in another way." (Jasmine, NNSE international student, Taiwanese, Applied Linguistics)

Jasmine noticed the existence of the cultural mechanism of promoting trials and errors as an essential process of learning. This mechanism would include making a learning environment where students can feel safe when they underperform. Noticing and appropriating this cultural tendency is highly likely to neutralize their underperformance sensitivity and facilitate international students in socializing themselves into the active learning practice where students are expected to interact with the lecturers and among themselves for their own learning development.

### (c) Confrontation dodging

Local students and international students identified another culturally characteristic feature of interaction by New Zealanders, which could be thought to support students' use of knowledge resources without much confrontation risk. Looking back at her long study and work experiences in NZ, one International MBA student pointed out local people's laid-backness, which she maintained would discourage them from confronting with one another in opinions:

But, uhm, what I see is, if, if someone argue something, like, there's no, no one, because everyone is so nice that Kiwis, you know, they are laidback, and, like, "Oh yeah, ok,

yeah.” So if someone says something, and no one says, “Hey, I actually disagree with you,” you know, that hardly happens. (Nadia, NNSE international student, Thai, MBA, Business School)

On the same note, a NNSE local student explained the unlikelihood that local students might confront among themselves:

I think Kiwi culture is quite good in the way that there is, uhm, not very confrontational. So even in classroom discussions, people are less likely to, uhm, confront and argue with others, so I guess that can be good and can be bad. (Mengsu, NNSE local student, MBA, Business School)

While he did not elaborate on how so, Mengsu evaluated this characteristic nature of the NZ culture both negatively and positively. An international student from the U.S., however, highlighted the positive side of this culture and detailed what about it would facilitate students’ learning:

Kiwis are a little more laid back than American students. American students can get really intense and battle with each other for grades, or a little more confrontational. Working in groups was easier here.... I think one would feel more comfortable presenting to your peers and discussing ideas with your peers, if you know that they’re not gonna be judging you or trying to compete with you. I think that’s a better classroom environment if that is true. (George, NSE international student, American, Engineering)

According to George, local students’ tendency to avoid competition and confrontation would develop accommodating learning environments in which students could freely discuss what they had to say.

George’s understanding of the NZ learning culture is quite interesting when compared with Asian students’ perception of their own learning culture. As shown in the previous section, Asian international students tended to avoid confrontational disagreement in interaction. George said that would be also the case with New Zealanders. In the case of Asian cultures, this tendency to avoid conflict (termed *conflict avoidance* in the previous section) would impact negatively on students’ interaction, demotivating them from active involvement in discussions, whereas the similar inclination (termed *conflict dodging* in the current section) would encourage

local New Zealander students to engage in educational interaction more freely. This sort of insight into the NZ culture, at the same time, might require a time-consuming development of understanding of cultural differences, which might also explain why Asian international students with relatively short experiences of NZ culture did not share this perception.

In summary of *appropriation of new cultural tendencies*, the existence of these cultural mechanisms as well as students' awareness and appropriation of them are expected to work so that they would facilitate students in overcoming their previous behavioural patterns. With these leverages, international students would be able to develop their active learning resources to meet the needs and expectancies in their new educational environments, including active creation and utilization of interaction with their peers.

## 5. Chapter Summary

In this chapter, a conceptual framework was constructed and proposed on the basis of empirical data to explain how international and local postgraduate students create and utilize educational interaction in and outside of classrooms in different learning modes. The students' participation in interaction with the lecturer and other peer students was conceptualized as results of the functional dynamics of a range of resources they bring with them into their learning contexts. The model of four major types of resources was grounded in the interview data: *linguistic resources*, *domain knowledge resources*, *social relation resources*, and *learning resources*. Each student is theorized to draw upon these resources when they make decisions on how they create or participate in interaction while they are self-monitoring the development of learning. The creation and utilization of peer interaction opportunities in postgraduate contexts is viewed in this holistic framework. Local students are conceptualized as active learners, who are equipped with *active learning resources* to contribute to the active and collaborative learning environments, whereas international students, especially from Asian cultural backgrounds, tend to lack active learning resources as well as linguistic resources and social relation resources, which are necessary for the contribution to active and collaborative learning practices. Shortage of particular resources, however, can be complemented strategically with other resources or overcome in the processes of socialization into the new educational practice. To acquire active



learning resources, international students develop *international learning resources* and overcome their previous cultural mechanisms. The next chapter will focus specifically on how postgraduate students can use their active learning resources for collaborative learning in a peer discussion.

## Chapter 7: Postgraduate Students' Active and Collaborative Learning in a Peer Discussion

### 1. Introduction

In this chapter, postgraduate students' actual performances in a peer interaction activity are analysed in terms of communicative functions for active and collaborative learning. The investigation and findings in this chapter are grounded in the findings provided in the previous three chapters (Chapter 4, 5, and 6). Chapter 4 and 5 provided evidence that students contribute greatly to active and collaborative learning practices at postgraduate level by participating in and negotiating the learning modes set up by the lecturers across disciplines. In Chapter 6, the students were found to draw upon their interaction resource system to create and utilize different types of peer interaction opportunities to develop their own learning and contribute to the maintenance of active and collaborative learning practices.

In the framework of students' educational interaction resources, which was proposed in Chapter 6, two of the important resource types identified are *domain knowledge resources* and *learning resources*. *Domain knowledge resources* constitute students' acquired *academic knowledge* and relevant *personal knowledge*, and *learning resources* concerns how students learn those domain knowledges in different learning modes. Local postgraduate students were found to be equipped with the expected types of learning resources in the active learning practices, namely, *active learning resources*. International students tend to lack those learning resources because of their previous educational practices together with their culturally bound psychological mechanisms. This chapter addresses how postgraduate students can actually use the identified *domain knowledge* and *active learning resources* required for peer interaction opportunities in the classroom group discussion activity. An answer is given in response to the third research question raised in Chapter 2 (Section 4.):

How do postgraduate students use their communicative competence in a peer discussion for their active and collaborative learning?

The answer is expected to help understand the nature of communicative competence expected in active and collaborative learning environments and facilitate EAP learners in their participation and socialization into educational practices in the target situation.

## **2. Analysis and framework of analysis**

A discourse sample from the recorded data of postgraduate students' peer interaction is systematically analysed, using the framework grounded in the data. The framework is conceptually based on Edelsky's *floor* (1981). In this section, the method of analysing students' interactive discourse is detailed.

### **2.1. Discourse sample and transcription**

An 18-minute-long group discussion in an Applied Linguistic class was taken as a sample of students' discourse of participation in a peer interaction opportunity that naturally occurred in the postgraduate classroom context. The students were given the task by the lecturer of talking in a group on what interested them most about the three readings they had been required to read prior to this particular class. The participants in this recording were a group of four students, with three native-speaker-of-English local students (Simon, Rachel, and Sonia) and one non-native-speaker of English international student from Taiwan (Jasmine).

The sample was transcribed by the current researcher, who, it should be noted, is a non-native speaker of English, aided by three native speakers, including two student participants in the recorded activity. Confidentiality agreement was signed by the co-transcribers to ensure that the information was ethically kept. Four participants' transcribed discourses were plotted along the time axis but separated into different columns in the Excel format so that each contribution from the four participants as well as shifts in the functional nature of the discourse could be followed clearly and simply. Utterances in the same row mean that overlapping is occurring among speakers. The following sample (Figure 7.1) is part of the actual transcription:

Figure 7.1: A sample of transcription

#	Simon	Rachel	Sonia	Jasmine
0				
1	I thought this was a bit difficult when I read it			
2	and then by the ti-, by the end I was like 'hmm'			
3	I don't know if I picked up all things			
4			which one, which one that then?	
5	the	the one	the... Iwashita one	
6	Iwashita one			
7	yeah		yeah	
8		yeah		
9		I didn't go into detail with it		
10		but it was, uhm, did it come out that, it was like vocabulary and fluency that had the main impacts  so I		
11	yeah basically it was saying that uhm			

## 2.2. Conceptual and analytical framework makings

Two frameworks were established and used for the current analysis of a sample of students' interaction discourse for different purposes. Firstly, the framework of *floor analysis* was created to identify discursive units as grids on which to map students' learning actions. This analytical approach was developed on the basis of the concept of *floor* (Edelsky, 1981) as well as the categories that emerged in the current discourse data. Secondly, the model of students' *educational interaction resources*, as described in the previous chapter (Chapter 6), was drawn upon as an interpretive scheme, with a particular focus on how students draw upon their *active learning resources* to develop their learning in a synthesis of the target *academic knowledge* and their *personal knowledge resources*. The framework of *active learning resources* based on the interview data was improved and re-established with identified categories in the discourse data. The following subsections represent the descriptions of these two frameworks and the establishment of the framework of floor analysis for postgraduate students' peer interaction.

### 2.2.1. Floor analysis

To map in the discourse data the students' efforts to make meanings in the context of group interaction for collaborative learning, *floor analysis* is proposed as an analytical method. The concept of *floor* was conceived in Edelsky (1981) as a collaboratively manageable communicative purpose, which is described in the following way:

The floor is defined as the acknowledged what's-going-on within a psychological time/space. What's going on can be the development of a topic or a function (teasing, soliciting a response, etc.) or an interaction of the two. It can be developed or controlled by one person at a time or by several simultaneously or in quick succession. It is official or acknowledged in that, if questioned, participants could describe what's going on as 'he's talking about grades' or 'she's making a suggestion' or 'we're all answering her. (1981, p.405)

This framework is instrumental when attention should be paid to a more global semantical unit, rather than “a locally managed system” (Iwasaki 1997, Lee 2011), on which Conversation Analysis (e.g. Sacks et al, 1974) focuses, so that analysts can capture what could be occurring wide across multiple turn construction units.

In the classroom learning research, this shift in focus from local discourse management to more global communication patterns has been made by approaches in which researchers seek after structural patterns in relation to speech events (e.g. Sinclair and Coulthard 1975). Jones and Thornborrow (2014) utilized the concept of floor along this line of investigation and re-interpreted the floor as a communicative space in which multiple people can participate. They made descriptions of structural patterns of educational activities (such as the classroom register activity and teacher-fronted instruction activity) that could occur in the classroom. Although Jones and Thornborrow successfully captures the nature of speech events in the classroom learning, other types of classroom communicative events are not likely to accommodate this approach due to their dynamic and complex internal organization, which seems to defy any identification of an articulated structural pattern. In classroom group discussions, for example, speech rights seem to be technically evenly distributed, so that students are allowed to exercise this right freely according to their own learning strategies and decision makings. In this sort of interaction, such a clear and definite discourse pattern is not expected to appear as is the case with the Initiation-Response-Follow-up model (Sinclair and Coulthard 1975) in the teacher-fronted classroom interaction. In the latter, speech rights are typically unevenly distributed, with students only allowed to have a limited range of participation in the interaction so that the teacher can take maximum control of the classroom learning environment.

In the currently proposed analysis, the floor is constructed as a discursive unit that can be generated, developed, and managed either individually or collaboratively for an intended communicative purpose. It is also conceptualized as serving as a dynamic and elemental function, rather than a static and structural one. Two characteristic features should be highlighted about the proposed concept of floor, which are sensitivities to (1) chronological dynamism and (2) meaning embeddedness and multi-functionality. The following sub-sections detail these general characteristics of the proposed floor analysis.

### 2.2.1.1. Sensitivity to chronological dynamism

One strength of this current analytical approach is to be able to capture the dynamism of spoken discourse while holding attention to chronological relationships between adjacent floors, as Conversation Analysis is aimed to explore locally managed development across adjacent turns.

For example, the row 1 in the Figure 7.2 below marks the start of the 18-minute-long peer discussion activity, and it is interpreted as the beginning of a floor with Simon as a floor holder. He is starting to talk about the problem he encountered in his reading of one of the students' required readings for this week (= Iwashita et al. 2008). Row 1 to 3 then constitute a floor with the interpretive label of, say, "Simon identifying an issue with understanding the required reading".

*Figure 7.2: A sample for sensitivity to chronological dynamism*

#	Simon	Rachel	Sonia	Jasmine
0				
1	I thought this was a bit difficult when I read it			
2	and then by the ti-, by the end I was like 'hmm'			
3	I don't know if I picked up all things			
4			which one, which one that then?	
5	the	the one	the.... Iwashita one	
6	Iwashita one			

7	yeah		yeah	
8		yeah		
9		I didn't go into detail with it		
10	so I	but it was, uhm, did it come out that, it was like vocabulary and fluency that had the main impacts		
11	yeah			
12	basically it was saying that uhm			

Shortly after the floor starts, another short floor with a different purpose (the row 4 to 8 in Figure 7.1) emerges. This floor is interpreted to have the function to sort out a problem that another participant, Sonia, identified with the preceding floor about the consensus of a topic to be talked about. On this floor, Sonia raises a question first, and she quickly makes up a hypothesis, which is instantly examined and confirmed by Simon as well as Rachel. Three students here quickly take care of a problematic feature of the preceding floor in a collaborative way. This floor might be labelled as ‘floor maintenance regarding the topic’.

After this collaborative floor maintenance effort, Rachel jumps in and begins to steer back to what Simon had started two floors back. Her floor addresses his confessed difficulty by diminishing the scope of discussion into the main point of the research article. This move of Rachel’s was responded to by Simon’s brief “yeah”, which concludes Rachel’s brief floor with the function of acknowledgement. The nature of this brief collaborative floor can be interpreted, for example, as “Rachel summarizing Findings of Iwashita et al.’. Prompted by this succinct summary, then, Simon starts to elaborate on what the article is all about from his perspective.



Rachel and Simon's combined efforts thus successfully demonstrate their understanding of the Iwashita et al. article the target academic knowledge, at the same time when they manage to reduce their cognitive load to a manageable level for their learning.

In this example, the dynamism of the students' discussion is described as chronologically shifting in the nature of floor, maintained and developed in a collaborative way with contributions from participants. This sensitivity to chronological dynamism is instrumental in capturing and understanding shifts in individual and collaborative functions on a given segment of the discourse.

#### 2.2.1.2. Meaning embeddedness and multi-functionality

A floor can be interpreted to be an independent floor with its own value at the same time when it works subordinately, embedded in another floor, and/or it acts as an umbrella floor that embeds in it sub-floors with different communicative purposes. In the figure below (Figure 7.3), for example, Floor 1 deals with Simon's reading difficulty as a topic (which is responded to and addressed in Floor 3), but it can also be interpreted as a preface or risk hedging about the certainty of his knowledge before demonstrating his comprehension of the academic article in the floor 4 and beyond.

*Figure 7.3: A sample for meaning embeddedness and multi-functionality*

#	Simon	Rachel	Sonia	Jasmine
0				
1	I thought this was a bit difficult when I read it			
	and then by the ti-, by the end I was like 'hmm'			

	I don't know if I picked up all things			
2			which one, which one that then?	
	the	the one	the.... Iwashita one	
	Iwashita one			
	yeah		yeah	
		yeah		
3		I didn't go into detail with it		
		but it was, uhm, did it come out that, it was like vocabulary and fluency that had the main impacts		
	so I			
	yeah			
4	basically it was saying that uhm			

In this interpretation Floor 1 does not simply constitute a semantically independent floor in its own light, but it also assumes a discursive function as an embedded floor in relation to another floor. Table 7.1 below shows a few examples of how different floor interpretations can be made out of the same discourse in Figure 7.3.

Table 7.1: Example of different floor interpretations

Interpretive Floor Label	Embedding Floor	Embedded Floor (Function)
Simon's reading problem	Floor 1	None
Collaborative problem solution for Simon's reading difficulty	Floor 1 and 3 combined	Floor 2 (condition setting for a topic)
Rachel and Simon's documentation of their reading comprehension	Floor 3 and 4 combined	Floor 1 and 3 (orientation and hedging)  Floor 2 (condition setting for a topic)

Admitting that this semantic multiplicity is open to a potential criticism on its inherent interpretative subjectivity, it is a powerful feature of the current qualitative discourse analysis that could capture a complex web of meaning makings in interaction. This limitation can be overcome to a large extent in a triangulation with a robust, systematic way of interpretation which is based on other data sources.

### 2.2.2. Student's educational interaction resources

The model of students' *educational interaction resources* as described in the previous chapter (Chapter 6, Section 3.) will be used as the interpretive framework for the current analysis. Elements from this frame are mapped onto the floor that holds multiple levels of interpretation of students' meaning making efforts. Students' performance in a collaborative task is thus operationalized into a collaborative floor making effort in which students exercise their *active learning resources* to share their *domain knowledge resources* among themselves. In other words, each floor is viewed as a realization of "speech activity" (Gumperz, 1977), or the amalgamation of a communicative action and a conversational topic, which is equivalent to the

synthesis of *active learning resources* and *domain knowledge resources*. Here is shown the table that summarizes aspects of floor and corresponding interaction resources (Table 7.2).

*Table 7.2: Floor aspect and interaction resources*

<b>Floor Aspect</b>	<b>Corresponding Interaction Resources</b>
Topic (= what type of knowledge is dealt with in the floor)	Domain knowledge resources
Action (= what type of action is being done in the floor)	Active learning resources

### **2.2.3. Establishment of the floor analysis framework for students' peer interaction**

Drawing on the conceptual framework of *floor analysis* as well as the interpretative framework of students' *educational interaction resource system*, preliminary analyses were conducted to test and improve the analytical framework. Two categories which had already been identified in the previous analyses with lecturers and students' interview data, namely, *academic knowledge* and *personal knowledge*, were confirmed to be interplaying as sub-types of domain knowledge sources. Specifically, postgraduate students were found to be discursively reconstructing the academic knowledge gained from their required reading materials and synthesizing it with their privately-acquired knowledge and perspectives. Below are examples of academic knowledge and personal knowledge realized in the discourse data (Table 7.3).

Table 7.3: Example of domain knowledge

Domain Knowledge Type	Floor Segment Example	Description and Interpretation
Academic knowledge	<div> <p>SIMON</p> <p>it was basically, the basic crux of it that I got was that basically, they got, they said they got a bunch of, uhm, people to look at, how they mark the CET, SET, which is like a college entrance test for spoken English,</p> </div>	In this floor segment, Simon summarizes the gist of one of the required readings for this class.
Personal knowledge	<div> <p>SONIA</p> <p>I think if you are thinking of travelling around the world it's a really useful thing to have</p> </div>	In this floor segment, Sonia shares her perspective about the significance of having globally credited certificate for job opportunities. She has a lot of experiences in teaching English around the world, so this

	because you can't pick up a lot of casual work to <i>(unrecognizable)</i> you know either IELTS or you can pick up	perspective seems to be based on her privately-acquired knowledge.
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Another set of categories, *active knowledge use* and *active knowledge reception*, which had also been found in the interview data with international students (see Chapter 6, Section 4.4.2.), were also identified as realizations of active learning resources. Students took turns to actively use their domain knowledge resources in their talk as well as support and validate other students' talk to construct and re-construct their learning based on received information. The table below shows examples of active knowledge use and active knowledge reception (Table 7.4). The left column represents an active learning resource as an interpretative category, the middle column does an example of the floor from the data, and the right column is the detailed interpretation of the floor. The bold font in the middle column indexes where the active learning resource is used.

*Table 7.4: Example of active knowledge use and active knowledge reception*

Active Learning Sub-category	Floor Segment Example	Description and Interpretation

Active knowledge use	SIMON	RACHEL	SONIA	In this segment, Rachel holds the floor and is using the target academic knowledge gained from one of the required readings and synthesizing it with her own personal perspective.
	mhm	<b>you know otherwise it might be,</b>		
		<b>you know, misconstrued and, Pam's sort of taking it as a different way,</b>	mhm	
	that's what I mean	<b>like, she is going to kind of lead them through and see what she can get</b>		
Active knowledge reception	SIMON	RACHEL	SONIA	Simon is functioning as a supporter of Rachel's floor while he is actively synthesizing what he is receiving from Rachel with what he said before this segment.
	mhm	you know otherwise it might be		
		you know misconstrued and Pam's sort of taking it as a different way	Mhm	
	<b>that's what I mean</b>	like she is going to kind of lead them through and see what she can get		

The two categories, namely, the floors of active knowledge use and active knowledge reception, are closely connected with each other. While one student is holding a floor and speaking (active knowledge use), other students are listening and supporting the floor with various functions such as showing acknowledgement or understandings or asking questions (active knowledge reception). This means that the two categories form a hierarchical relation with each other. Active knowledge use basically functions as a main floor and active knowledge reception is a supportive floor which is embedded in the main floor.

In the preliminary discourse analyses, four sub-categories of active knowledge use were also found in relation to the current group discussion task (= talking about interesting aspects of the three required readings), which are *academic knowledge sharing*, *personal knowledge sharing*, *claim*, and *affective evaluation*. These sub-categories embedded, and were embedded by, one another to serve students' various meaning making strategies. Below is the table that shows the summary of identified sub-categories of active knowledge use (Table 7.5). Examples of these categories will be shown when needs arise as the findings will be described later in the current section.

*Table 7.5: Categories of active knowledge use*

Floor Category	Topic Type in the Floor	Floor Sub-category	Floor Sub-category Specification
Active knowledge use	Academic Knowledge	Academic knowledge sharing	Describing what is written in the required readings
	Personal knowledge	Personal knowledge sharing	Describing what students know from their previous experiences and learning outside of the required readings.
		Affective evaluation	Describing how students feel about shared knowledge
		Claim	Describing what students think about shared knowledge



A universal function that could potentially embed itself in any floor was found through the detailed analyses of the data. This function, *floor management*, covers a wide range of aspects of spoken communication, serving any type of floor to help the floor accomplish what it is intended for. For example, most noticeable floor management function in the current data was backchannel feedback such as “mhm”, “yeah” or “yap”. This type of floor management signals the floor supporter’s or engaged listener’s support to the floor holder or speaker in terms of understanding or acknowledging what is currently being transferred. This floor management function occurred in any active knowledge use floor shown in the table above (Table 7.5). The list of identified functions of floor management is shown below (Table 7.6). Examples of these categories will be shown as the findings will be described later in the current section.

*Table 7.6: Identified sub-functions of floor management*

<b>Floor Management Category</b>	<b>Sub-categories</b>	<b>Description</b>
Information transfer	Understanding,	To address aspects around the reception of transferred information.
Information content	Information addition, information edition, information elicitation	To address aspects around the sufficiency and appropriateness of transferred information.
Perception	Agreement, disagreement	To address aspects around the validity of claimed perception and evaluation
Administration	floor condition set up, floor opening, floor holder appointment	To address any administrative aspect to make a floor happen.

The floor management function can be done individually by the floor holder or supporters or collaboratively by both of the holder and supporters. The following two samples of the data also represent examples of the individual and/or collaborative floor management functions (Figure 7.4 and 7.5):

*Figure 7.4: Collaborative floor management*

<b>Simon</b>	<b>Rachel</b>	<b>Sonia</b>	<b>Jasmine</b>
	did anyone read this Young and Elder one?		
yeah		Yes I did I can't quite remember 'cause I read	mhm
	abstract	it a few days ago	

Figure 7.4 above shows that four participants are collectively setting up the condition for a discussion on one of the required readings. This collaborative floor management functions as a starter of a new main floor and is embedded in it.

*Figure 7.5: Individual floor management*

<b>#</b>	<b>Simon</b>	<b>Rachel</b>	<b>Sonia</b>	<b>Jasmine</b>
1				
			I I I don't want to be too controversial but	
		<i>laughter</i>	and you can comment on this, Simon, but	
2	mhm		I also felt quite strongly there was a gender driven	

		me too	uhm communication issues going on	
		me too		
	oh really	and I felt very strongly that she was a teacher		

Segment 1 (the shaded bar) of Figure 7.5, shown above, represents an example of semi-individual floor management. Before starting a claim proposition about gender possibly impacting on communication, Sonia proactively invites Simon to participate in her floor or make his own floor in relation to her claim. This floor management function by Sonia was responded to by Rachel in the form of laughter, but, unlike the example in Figure 7.4, it seems to be mostly performed individually by Sonia.

While it can be used by the floor holders by its definition, the floor management function is analyzed in this thesis only when the function is initiated by the floor supporters. This decision has been made because floor supporters' initiatives to perform floor management can be captured as a realization of *active knowledge reception resources*, which the current discourse analysis aims to explore as one of its target phenomena. Backchannels are also removed out of the focus of the current analysis, though they constitute floor management functions by floor supporters, since backchannels do not seem to -match the definition of active knowledge reception in terms of activeness. The active knowledge reception is given the status of floor only if they are explicitly performed and addressed in a collaborative way by the floor participants. They will otherwise be called 'functions' rather than 'floors'. Table 7.7 below shows the list of identified types of active knowledge reception as floor management functions.

*Table 7.7: Identified categories of active knowledge reception*

Floor Category	Active Knowledge Reception Categories	Active Knowledge Reception Sub-categories
	Information transfer support	Repetition

Active Knowledge Reception		Utterance completion
		Paraphrase
		Summary
	Information content support	Information addition
		Information elicitation
		Information edition
	Perspective support	Active agreement/disagreement
		Validation
		Substitutive affective evaluation
		Substitutive claim

As Table 7.7 shows, *active knowledge reception* are divided into three categories; *information transfer support*, *information content support*, and *perspective support*. Each category is realized in a range of ways. In the case of information transfer support, for example, it can be realized in the forms of *repetition*, *utterance completion*, *paraphrase*, and *summary* as efforts on the part of active listener students to support the speaker student's floor. Descriptions of these communicative functions are shown below (Table 7.8).

*Table 7.8: Description of active knowledge reception functions*

Active Knowledge Reception functions	Description
Repetition	Floor supporters repeat part of the floor holder's utterance.
Utterance completion	Floor supporters complete the floor holder's utterance by supplying phrases, words, or sentences.

Paraphrase	Floor supporters interpret the floor holder's utterance and put it into a different form with the same or similar meaning.
Summary	Floor supporters summarize what the floor holder's described extensively.
Information addition	Floor supporters provide information the holder has not provided.
Information elicitation	Floor supporters try to elicit needed information in the form of asking questions. This function is the same function of a different form with <i>information addition</i> .
Information edition	Floor supporters edit information given by the floor holder into what they believe to be correct or more appropriate information.
Active agreement/disagreement	Floor supporters show their agreement or disagreement with the floor holder's claim in an active way.
Validation	Floor supporters examine the validity of the floor holders' perception.
Substitutive affective evaluation	Floor supporters evaluate affectively what the floor holder describes to them. Seemingly the floor supporters share the same perspective that the floor holder has.
Substitutive claim	Floor supporters make a claim drawing upon what the floor holder describe. Seemingly the floor supporters share the same perspective that the floor holder has.

The next section will provide the findings from the details of the analyses, drawing upon a set of established frameworks (see summaries in Table 7.5, 7.7, and 7.8) for the floor analysis of students' active and collaborative learning in their peer interaction.

### 3. Findings

The floor analysis found how differently each of the four postgraduate students in the recording used their active learning resources in a peer discussion while developing floors collaboratively. In this section, major findings are reported on (1) 'how postgraduate students utilize their active learning resources in the discourse of their educational peer interaction', (2) 'how students individually contribute to the group discussion floor with communicative actions', and (3) 'what sorts of collaboration postgraduate students realize in the discourse of their educational peer interaction'. These guiding questions are differently operationalized forms of the research question 'How actively and collaboratively do postgraduate students learn in their peer interaction?'

#### 3.1. How do postgraduate students utilize their active learning resources in the discourse of their educational peer interaction?

The participant students were found to use their active learning resources actively to make layers of floors which are intertwined among themselves to present a web of meaning makings. Their discussion also shifted in a dynamic way, with each student drawing upon their active learning resources and taking various actions for their learning.

The entire group discussion floor, first of all, was divided by students' initiatives into three different learning material floors, based on the three required research article readings (Iwashita et al, 2008, Brown, 2003, and Zhang and Elder, 2010). This means that students managed to cover all the required readings in their group discussion. Then each learning material floor was divided into sub-floors with different floor holders with different learning purposes and strategies. This level of floor is labelled '*active knowledge use floor*'. Active knowledge use floors then contained a range of sub-floors representing sub-types of active knowledge use, which are *academic knowledge sharing*, *personal knowledge sharing*, *claim*, and *affective evaluation* (see Table 7.5). Students showed their understandings and perspectives of the required readings freely. Lastly, *active knowledge reception functions* were identified in relation to these sub-types of active knowledge use. Listener students supported the speaker students'

floors, using various functions, including utterance completion, paraphrasing, and eliciting and adding information. An example of the relations among the identified floors and functions are shown below in Table 7.9, which represents the floor in which postgraduate students talk about a required reading, Iwashita et al. 2008. The whole floor analysis is appended (Appendix 4). Floors in the left columns of the table embed floors in their right columns, which collectively constitute hierarchical floor relations. This table clearly shows how floors with different aspects of function are embedded in multiple layers, which was conceptualized as a characteristic feature of the current floor analysis in Section 2.2.1.2..

*Table 7.9: Floor organization of postgraduate students' active knowledge use and reception in a group discussion*

<b>Learning Mode Floor</b>	<b>Learning Material Floor</b>	<b>Active Knowledge Use (AKU) Floor &lt;Topic&gt;</b>	<b>Active Knowledge Use Sub-floor</b>	<b>Active Knowledge Reception Function</b>
Group discussion floor  (In-Class Collaborative Task floor)	Iwashita et al. 2008	Simon's AKU  <Iwashita et al.'s validation of IELTS speaking test>	Rachel's academic knowledge sharing	
			Simon's academic knowledge sharing	Rachel's utterance completion
				Sonia's information elicitation(floor)
				Sonia's paraphrase
				Sonia's utterance completion
			Simon's affective evaluation	

		Sonia's AKU  <what is problematic about speaking tests for a teacher examiner>	Sonia's claim	Simon's information elicitation(floor)
				Rachel's information elicitation(floor)
			Simon's counter claim against Sonia	Sonia's AKR for disagreement (floor)
				Sonia's paraphrase

It should be noted, however, that the boundary between floors was sometimes not so clear-cut. For example, around the end of the floor shown in Table 7.9, the then floor holder, Sonia, extensively maintained her floor by making a general claim that could cover both the Iwashita et al. and Brown articles, without specifying which article she is referring to. In this case, the decision was made that this ambiguous segment be incorporated into the Iwashita et al. floor, considering its relevancy to Simon's preceding floor in terms of problematizing speaking tests' validity and a linguistic clue seemingly signaling a shift in topic.

### 3.2. How do students individually contribute to the group discussion floor with communicative actions?

Next for the current floor analysis, individual use of active learning resources is quantitatively described to show how students can differ in terms of contributions to collaborative floor makings. Occurrences of floor holding and support moves were counted on a per-participant basis. Firstly, below is the table that shows the results of occurrences of floor holding moves with *active knowledge use* on individual basis (Table 7.10).



Table 7.10: Individual contribution in a peer interaction activity

Active learning resource type	Active learning resource sub-functions	Peer interaction participants				
		NSE local student			NNSE international student	Total
		Simon	Rachel	Sonia	Jasmine	
Active knowledge use	Academic knowledge sharing	2	5	2	0	9
	Personal knowledge sharing	1	1	1	1	4
	Claim	2	3	5	0	10
	Affective evaluation	3	0	1	0	4
	<b>Active knowledge use total</b>	<b>8</b>	<b>9</b>	<b>9</b>	<b>1</b>	<b>27</b>

The table above shows that the intended nature of this group discussion as a collaborative task was reflected in distributions of sub-functions. *Academic knowledge sharing* and *claim* are two most frequently emergent among the four sub-functions of *active knowledge use resources*. Specifically, *academic knowledge sharing* occurred nine times whereas *claim* was made 10 times across different floors in the 18-minute-long group discussion. Given the nature of the task, which is to affectively evaluate aspects of academic knowledge in the three required readings, it is natural for students to make floors to demonstrate and share academic knowledge gained from the readings. On the other hand, students flexibly interpreted and expanded the nature of the current task to include making personal claims regarding what grabbed their attention. *Affective evaluation* was done just four times across two participants, Simon and Sonia, while *claim* was made ten times across three students, Simon, Rachel and Sonia.

As for individual differences in support moves in the collaborative floor makings, Table 7.11 below shows how four postgraduate students used active knowledge reception functions.

Table 7.11: Individual contribution in a peer interaction activity

Active knowledge reception sub-functions		Peer interaction participants				
		NSE local student			NNSE international student	Total
		Simon	Rachel	Sonia	Jasmine	
Information transfer support	Repetition	0	1	0	0	1
	Utterance completion	3	5	2	0	10
	Paraphrase	1	3	2	0	6
	Summary	0	2	0	0	2
Total		4	11	4	0	19
Information content support	Information addition	2	3	0	0	5
	Information elicitation	6	3	2	1	12
	Information edition	1	0	0	1	2
Total		9	6	2	2	19
Claim support	Claim elicitation	1	0	0	0	1
	Agreement / disagreement	1	1	0	0	2
	Substitutive claim	1	0	0	0	1
Total		3	1	0	0	4
Affective evaluation support	Substitutive affective evaluation	6	0	0	0	6
Total		6	0	0	0	6
Active knowledge reception total		22	18	6	2	48

Three findings are noticeable from Table 11. Firstly, *information transfer support* and *information content support* (that total up to thirty-eight times) are nearly four times as frequent as other sub-functions such as *claim support* and *affective evaluation support* (that total ten times). Secondly, looking at types of *information transfer support*, *utterance completion* is a prevailing sub-function, which constitutes more than other three sub-functions combined in the same category. Lastly, within the sub-functions of *information content support*, *information elicitation* was found to be most frequently used to manage information content on the floor, nearly doubling the other sub-functions (*information addition* and *information edition*) combined.

As for individual contributions, there are differences in each student's individual discourse strategy. Below is the table that summarizes individual participant profiles on the current collaborative task (Table 7.12), compiled based on the results in Table 7.10 and 7.11:

*Table 7.12: Individual profile of contribution in a peer interaction activity*

Participant Category	Name	Profile
Native-speaker-of-English local student	Simon	<ul style="list-style-type: none"> <li>• Most active among participants in exercising active learning resources.</li> <li>• Actively making claims and affective evaluations himself as well as supporting another student's claim and affective evaluation.</li> <li>• Most active in support for information content, eliciting, adding, and editing information across floors.</li> </ul>
	Rachel	<ul style="list-style-type: none"> <li>• Most active in academic knowledge sharing.</li> <li>• Most actively engaging in information transfer support, repeating, completing, paraphrasing, and summarizing other students' utterances.</li> </ul>

	Sonia	<ul style="list-style-type: none"> <li>• Active in making claims, as often as other two local students combined.</li> <li>• Conservative in using active knowledge reception resources.</li> </ul>
Non-native-speaker-of-English international student	Jasmine	<ul style="list-style-type: none"> <li>• Limited in participation to one personal knowledge sharing, one information elicitation, and one information edition. No academic knowledge sharing, no claim, nor affective evaluation.</li> </ul>

As shown in the table above, this case represents an interesting range of distinctive profiles among the participants in peer interaction. Obviously, Jasmine, an NNSE/international student from Taiwan, contributed far less than the three NSE/local participants in this group discussion. Her contribution was limited, in variety and number of times, to one sharing of her personal knowledge, one information elicitation, and one information edition. The three NSE/local students also showed individually distinctive ways of participation in the peer interaction activity. Most active in use of active learning resources, Simon was also characterized by his use of supportive moves for other students' claims and affective evaluation. Rachel was distinctively active in transferring information, in the form of sharing the target academic knowledge and supporting other students' information sharing. Sonia was active in her claim but not so in her supporting moves for other students' floors, which means that, while she was listening, she tended to be silently engaged or use backchannels, which do not appear in the current analysis.

As found and described in the previous chapter (Chapter 6), these individual disparities in the participation in a peer interaction opportunity should be interpreted holistically in light of students' *educational interaction resources*, which are composed of four different resource types; *domain knowledge resources*, *learning resources*, *social resources*, and *language resources*. For example, Jasmine's relative inactive use of active learning resources in the peer activity could be interpreted to be literally attributed to shortage of active learning resources or due to shortage of other resources.

### **3.3. What sorts of collaboration do postgraduate students realize in the discourse of their educational peer interaction?**

Analyses of relations among floors and functions revealed that students were realizing their collaborative learning in a wide range of ways. Three types of collaboration were identified through the analyses of the floor relations. Those are (1) collaborative floor making with floor support, (2) collaborative floor making with differing perspectives, and (3) collaborative floor making with labor division. In the following sub-sections, each type of collaboration will be described with examples.

#### **3.3.1. Collaborative learning with floor support**

Students' use of active knowledge reception resources was found to represent a range of floor support functions, which enabled different types of collaboration in floor makings. Four categories emerged through the analyses of the ways floor makings were supported with active knowledge reception resources, which are (1) information transfer support, (2) information content support, (3) affective evaluation support, and (4) claim support. These four categories will be detailed in the following sub-sections.

##### **3.3.1.1. Collaborative learning with Information transfer support**

Floor supporter students drew on their active knowledge reception resources by repeating, completing, paraphrasing, and summarizing what the floor holders uttered. These functions can be captured as supports to the floor holder in terms of transfer of intended information. With these types of supportive moves, the floor holders can make sure of whether their participants are engaged in the ongoing collaborative floor making and whether information is being successfully transferred. The table below (Table 7.13) shows the occurrences of these actions in the 18-minute group discussion.

*Table 7.13: Occurrence of information transfer support*

Active Knowledge Reception Type	Functions	Occurrence
information transfer support	Repetition	1
	Utterance completion	10
	Paraphrase	6
	Summary	2
Total		19

Out of the total nineteen occurrences of these functions, fifteen were found to be occurring among native speaker local students (Simon, Rachel, Sonia), with the other four occurring between the non-native speaker student (Jasmine) as the floor holder and a native speaker local student (Rachel) as the floor supporter. These results suggest that these functions of active knowledge reception seem to be largely motivated by some other intention than linguistic support involving a student with limited language proficiency.

### 3.3.1.2. Collaborative learning with Information content support

Students were found to be actively supporting the speaker's floor making, drawing upon their active knowledge reception resources. They actively elicited, added, and edited academic and personal information when needs arose. Thus these students were collaboratively managing the quantity and quality of the information content they shared in the floors. Below is the table that shows the occurrences of the actions taken by floor supporter students to manage information contents across floors in the group discussion activity (Table 7.14). There is a clear difference in occurrence among the three support functions; addition, elicitation, and edition.

*Table 7.14: Occurrence of information content support*

<b>Active Knowledge Reception Type</b>	<b>Functions</b>	<b>Occurrence</b>
Information content support	Information addition	5
	Information elicitation	12
	Information edition	2
Total		19

As is obvious from the table, floor supporter students in the current group discussion frequently drew upon their active knowledge reception resources in the form of information elicitation. This function occurred 12 times in the 18 minute group discussion. On the other hand, the students also addressed perceived information void by supplying needed information five times and took care of incorrect pieces of information by editing it into correct ones twice.

The following examples will show how students actually implemented their active knowledge reception resources for information addition, elicitation and edition. In Figure 7.6, Jasmine, apparently not having read the Brown article, notices she lacks information she needs to understand the major points as well as implications of the article. She would like the floor holder, Rachel, to add this information to the collaborative floor, so she tries to elicit it from her.

*Figure 7.6: Example of information elicitation*

Simon	Rachel	Sonia	Jasmine
			<b>ask the question</b>

			<b>is this two, they are, uhm, just interview, interviewers?</b>
	yeah two interviewers		<b>or they are trained before doing this research?</b>
	oh they are trained IELTS interviewers		
			so they are trained IELTS interviewers
	mm yap and	mhm	but
but they are not acting in the same way			
	no, absolutely not, that's the behaviour of interviewers	so that's the, that's the	

In this floor of academic knowledge sharing, Jasmine as a floor supporter successfully elicits the essential information from the floor holder, Rachel, and tries to summarize the core part of the findings of the Brown article about across-examiner variation, to be assisted by another floor supporter, Simon, in the form of utterance completion. Thus the participant students in this floor finally add important information in a collaborative way and share the understanding of the target academic knowledge successfully. Jasmine's implementation of her active knowledge reception resources contributed to this collaborative learning floor developing in the sense of integrating the essential piece of information.



The next example (Figure 7.7) shows the way two floor supporters draw upon their active knowledge reception resources to add to floor information and co-construct further knowledge for deeper understandings of the Brown article. Simon and Rachel are supporting the floor of a non-native-speaker student who shares her personal experiences of taking the IELTS test. Simon and Rachel are here adding their well-reasoned scenario of a test preparation, with acknowledgements from the floor holder. Prior to this segment, the floor was dealing with how the topic of the IELTS speech test is chosen by the examiner without a candidate knowing what it will be. Bold fonts represent where Simon and Rachel as floor supporters added information to Jasmin's floor.

Figure 7.7: Example of information addition

SIMON	RACHEL	SONIA	JASMINE
so what? <b>When you are preparing you are saying OK you need to know at least</b>			Yeah
<b>you need to know the content at least three or four</b>			
	<b>prepare as many topics as possible</b>		
	LAUGH		yes prepare as many as [unrecognizable]I can
	<b>yeah you can look at past exams and say like OK so these ones often come up</b>		

hm	<b>so I'm going to prepare at least you know</b>		
	<b>these minimum these basic ones</b>		Mhm
	yeah		

Simon starts to add ‘a need for test preparation’ as a sub-topic to the ‘topic impact’ floor Jasmine holds. Rachel then takes over and develops this sub-topic, presumably drawing upon her previous work experience involving IELTS, into a likely scenario of ‘how to prepare for speaking test’. Thus, students go further with details of the floor topic Jasmine brings up and collaboratively construct deeper understanding of the knowledge.

Lastly for this sub-section, in the following example (Figure 7.8), the floor holder’s (Rachel) understanding of the target academic knowledge is quickly problematized by a floor supporter (Simon) who exercises his active knowledge reception resources. In the utterance in bold fonts, Simon tries editing the floor holder’s interpretation in terms of generalizability in a succinct way:

*Figure 7.8: Example of information edition*

SIMON	RACHEL	SONIA	JASMINE
	and then he was expecting more but he didn't phrase the questions in a way that would be		
		encourage	
Elicit, elicit in a question form	encourage her to speak more,  elicit	yeah mm	
	yeah		

	was just like kind of yes or no questions and	mhm	
	he'd say like 'right' but 'right' doesn't mean 'tell me more'		
		yeah	
Mm	you know?		
	or mmm    yeah	yeah	
<b>for some people it does, but yeah</b>		and and	

After sharing her interpretation of an IELTS examiner's behaviour in the Brown article as in "right doesn't mean 'tell me more'", Rachel tries to elicit supportive acknowledgements from other students, uttering "you know?" Sonia catered for this need by uttering "yeah", whereas Simon makes a minor edition to Rachel's claim. He limits the generalizability of the truth of Rachel's utterance by saying "for some people it does", while generally acknowledging its validity. This supportive function by Simon is considered to be of help to Rachel's learning, in the sense that her interpretation is robustly evaluated from an alternative perspective too and given critical peer feedback. Rachel's active knowledge use is thus supported by Simon's edition move in the context of collaborative learning. -

### 3.3.1.3. Collaborative learning with affective evaluation support

A student, Simon, frequently made an affective evaluation of the knowledge shared by another student. The following figure (Figure 7.9) shows how Simon evaluates what Rachel shared, transforming the nature of floor from Rachel's personal knowledge sharing into collaboratively-constructed affective evaluation. Rachel is talking about her previous experience as an administrative staff at a language school, where she had one of the language school student jump from five point five to eight in IELTS speaking score in a very short period of time.

Figure 7.9: Example of affective evaluation support

Simon	Rachel	Sonia	Jasmine
	and he was like but I got eight you know	mhm	
	I was just like	mhm	
	absolutey how do you go		
Yeah	from a five point five to an eight		
	in speaking	yeah	
<b>that's disgusting</b>			
	in one month, yeah		
<b>that's disgusting</b>		mhm	
	yeah		

Since Rachel makes an acknowledgement “yeah” each time Simon makes an affective evaluation of the shared knowledge, the two students are here harmoniously sharing their personal knowledge and perspective with each other. In other words, they are here successfully engaged in a collaborative floor making, drawing upon their active learning knowledge. Rachel is exercising her active knowledge use resources, sharing her personal knowledge with other students, while Simon is utilizing his active knowledge reception resources, making an affective evaluation for Rachel.

#### 3.3.1.4. Collaborative learning with claim support

Floor supporters also assisted the floor holders in their claim making. This support was identified to vary in form and function from simply expressing agreement or mild disbelief, such

as “me too” or “oh really” to making a substitutive claim for the floor holder to asking a validating question. Here the latter two functions will be described with examples.

Bold fonts in Figure 7.10 shows an example of collaborative learning with a substitutive claim by a floor supporter for the holder, contributing to co-constructing a claim floor. After making repeated affective evaluations of the personal knowledge shared by the floor holder, Simon moves on to make a critical claim, saying “they should never be able to do that”, which means that the identified inconsistency of IELTS speaking test score should not be left unaddressed:

*Figure 7.10: Example of substitutive claim*

Simon	Rachel	Sonia	Jasmine
	and he was like but I got eight you know	mhm	
	I was just like	mhm	
	absolutely how do you go		
yeah	from a five point five to an eight		
	in speaking	yeah	
that's disgusting			
	in one month, yeah		
that's disgusting		mhm	
	yeah		
<b>they should never be able to do that</b>			
	should not		
that's disgust-	should not	so someone should ask a question	

		when it happens	
	[LAUGH]	yeah [LAUGH]	shall I share my

This claim of Simon's is shared by Rachel, the floor holder, when she repeats "should not" twice. In this way, Simon helps develop Rachel's personal knowledge sharing floor into claim floor, drawing upon his active knowledge reception resources. The two students are here sharing their perspective through a floor making.

The next figure (Figure 7.11), on the other hand, shows that collaboration can also be possible through critical validation in the claim floor. As Sonia holds the floor to claim that she sees an issue with speaking tests from the examiner's perspective, Simon, a floor supporter, raises a question from an alternative perspective. Simon's support move results in the two students collaboratively engaging in the process of validating a claim:

*Figure 7.11: Example of validation*

Simon	Rachel	Sonia
		it's so hugely problematic, the _whole_assessment of lang-, English
mhm	mhm mhm	
		Because, you know, you got, uhm, the criteria, I mean, I,
		if you've ever done any testing of spoken English
		trying to, uhm, keep your mind across, you know
		while someone's speaking
		half a dozen criteria and rate them is, is hugely difficult

could you not, this, or you could just record them, couldn't you?	mhm	
wouldn't it be that , that is		
		you can't be, you know, you gotta be quite pragmatic
		if you got forty people to test, you can't, you know,
		and results have to be in by,
	mhm	you know, uhm, to the head of the department by the end of the week
	yeah	
		you can't spend half an hour re-playing every you know
mhm		it's certainly a help if you've got one, you're a bit, but
cause that if	yeah	

In this floor, Sonia first makes a claim of speech assessment being problematic in terms of practicality from the perspective of examiners. Simon, as a floor supporter, immediately responds to raise a critical question around the validity of Sonia's argument, pointing out a possible solution to the perceived problem. Sonia addresses Simon's question by providing a likely scenario for an examiner working for some educational institution, evaluating Simon's solution negatively as impractical while admitting some beneficial feature in it. This discourse development can be captured as a collaborative learning process which helps strengthen Sonia's argument. With Simon's validating question, Sonia incorporates refuting and conceding moves into her argumentation. Thus, her claim becomes stronger than it would be without Simon's active participation in her floor.

### 3.3.2. Collaborative learning with differing perspectives

Collaborative learning was also found to be realized as the collective effort of making a floor as an intersection of different perspectives on the same topic. In this type of collaborative learning, different students bring along different views in the form of sub-floors which are embedded in an umbrella floor with the same topic. The next example (Figure 7.12) shows how students take turns to contribute alternative speculations as to what could cause a gap between two examiners showing different behaviours in the IELTS speaking interview:

Figure 7.12: Example of contrasting perspectives

SIMON	RACHEL	SONIA
	like, I mean, she was a really, uhm, you can feel that she was, like, supporting her students	
mhm	she was like 'I really want you to do your best', and <b>this guy, I felt, might have been related to gender,</b>	Mhm
	<b>was just like very, he didn't know how to have a, you know? how to,</b>	
mhm		yeah <b>or just more linear about stuff</b>
	Mm	<b>you know, like,</b>
mm		<b>'OK, so that's your reply? OK', uhm,</b>
	Yeah	



		it's not that he, he was being mean about
	no	
		not encouraging them
	no	
		it was just, it was just much more, uhm, you know, 'OK, so I asked a question, you answered', and that's that, you know,
Mm	yeah you don't have any more opportunity to to kind of reexplain	yeah
it might be even more like institutional kind of power roles too, I mean,		
if one is the actual person's teacher		yeah whereas
then the person wants them to do well		mhm
that's the other flaw on the scheme		
it's like	yeah	mhm

Prompted by the floor holder, Rachel, who tries to verbalize her interpretation of the cause of the unsupportive male examiner's behaviour, Sonia and Simon alternately share their own interpretations with floor participants. Each of the students is here exercising their own personal knowledge resources to have a speculation. Thus three sub-floors with different perspectives are juxtaposed within an umbrella floor on the topic 'the cause of differing behaviours between two examiners in the Brown article'. The floor participants, including Jasmine, who does not contribute any personal perception on this floor, are thus having an opportunity to compare three different perspectives against each other in this collaborative learning.

Collaborative learning with different perspectives can take on the floor of multiple conflicting, not just contrasting, views. In the next example, two students try to persuade each other to accept their claims. Since this is a large floor having three embedded floors, each embedded floor is numbered chronologically and shown individually (Embedded Floor 1 in Figure 7.13, Embedded Floor 2 in Figure 7.14, and Embedded Floor 3 in Figure 7.15). The whole floor is appended (Appendix 5).

*Figure 7.13: Example of conflicting perspectives: Embedded Floor 1*

#	SIMON	RACHEL	SONIA
1	<b>could you not, this, or you could just record them, couldn't you?</b>	mhm	
	<b>wouldn't it be that , that is</b>		
			<b>you can't be, you know, you gotta be quite pragmatic,</b>
			<b>if you got forty people to test, you can't, you know,</b>
			<b>and results have to be in by,</b>
		Mhm	<b>you know, uhm, to the head of the department by the end of the week</b>
		Yeah	

			you can't spend half an hour re-playing every, you know,
	mhm		it's certainly a help if you've got one, you're a bit, but
	'cause that if	Yeah	

In this whole floor, Simon and Sonia are discussing whether and how within-examiner variation, which they consider to be relevant to the target academic topic (= across-examiner variation) in the Brown article, can be addressed. In Embedded Floor 1 (Figure 7.13), Simon suggests that recording interviews is a viable means to ensure that the potential variation can be minimized, while Sonia raises a critical view on the practicality of the method Simon Suggested. The two students' views are conflicting with each other.

Embedded Floor 2, which is shown below (Figure 7.14), is created by Rachel's active knowledge reception for additional information and Sonia's reaction to Rachel's question:

*Figure 7.14: Example of conflicting perspectives: Embedded Floor 2*

#	SIMON	RACHEL	SONIA
2		have you done any, uhm, like formal testing? Like, IELTS or anything like that?	'cause it
		Mhm Yeah	I hav-, I haven't, I've done uhm, testing at university level according to the university's, uhm, requirements
			but I haven't done any internationally scaled testing
		scaled one yeah	

	it's funny because	Interesting, like, what sort of training you would get if you, uhm,	
	yeah, yeah, yeah,		mhm

In the end of Embedded Floor 2, Rachel tries to explain why she asked Sonia about her experience of being an examiner for any large scale testing, but this embedded floor does not develop any further as Simon interrupts and brings the nature of the floor back to conflicting perspectives in Embedded Floor 3 (Figure 7.15):

*Figure 7.15: Example of conflicting perspectives: Embedded Floor 3*

#	SIMON	RACHEL	SONIA
3	<b>that's interesting thought 'cause</b>		because this
	<b>I was just gonna say,</b>		
			yeah
	<b>when you're in New Zealand context, you have to video and you have to use that</b>		
	<b>as your primary report any minute you can't,</b>		mhm
	<b>you can't do it any other way</b>		
			mhm
	<b>you can't sit there and go 'oh yep, they got that'</b>		
	<b>because</b>		mhm
	<b>if someone needs to see good mark, they got, they also need to see the video</b>	yeah, yeah	

just to say, to justify in case, for example, they use the		
they use these things to,		'cause it hugely uhm
to fit the purpose or these things		
so is		resource
		uhm
		you know heavy
hell yeah		
yeah		
but in, I don't know, I think it's difference between		
what teachers are expected to do		
in the context of, you know, like,		mhm
no, if you got an assessment to do and put this many people		
to assess		mhm
you do it until it's done		
you don't	mhm	mhm
you don't go 'oh well I got forty'		
you do it		mhm
		you just have to, mhm
you smash it out		
you do it on the weekend		mhm
you do it whenever		
you do it, you know		Mhm
different expectation, man		

Across Embedded Floor 2, Sonia and Simon are conflicting in the Embedded Floor 1 and 3 in terms of how issues around the practicality to speech assessment should be addressed in the context of educational institutions. As Simon mentions in the last utterance in his floor, the two

students' conflicting perspectives seem to stem from "different expectations" in different contexts. In this way, floor holder and floor supporter students have an opportunity to learn divergent views on an aspect of speech assessment. Each student's initiatives to exercise their differing personal knowledge resources have made possible this type of collaborative floor.

### 3.3.3. Collaborative learning with labour division

As the third type of collaborative learning, students brought along different knowledge resources that combine together to collectively make a floor that contains a range of distinctive aspects of the target knowledge. In other words, students divide up work load, knowingly or unknowingly, and each takes up a different aspect of a complex knowledge body and share it among themselves. Unlike collaborative learning with differing perspectives (as described in 3.3.2.), there occurs no contrast nor conflict among students' contributions. Here two examples of distinctive nature will be shown for this type of collaborative learning.

Firstly, in the following figure (Figure 7.16), the target academic knowledge from the Iwashita article is reconstructed collaboratively by Simon and Rachel. The two students are in charge of different parts of the article.

*Figure 7.16: Example of labor division on different parts*

SIMON	RACHEL	SONIA
	I didn't go into detail with it	
so I	but <b>it was, uhm, did it come out that, it was like vocabulary and fluency that had the main impacts</b>	
<b>yeah basically it was saying that, uhm,</b>		
<b>that they were,</b>		

<b>so they looked at tests, the TOEFL tests, and they looked at how people had ranked</b>		
<b>it's supposed to be a holistic test that, that ranks over certain certain, uhm, scores</b>		mhm
<b>and well it has its own endemic score but</b>		
<b>what they did was, they went back to look over the data that came from each of the, each of the testing participants</b>		
<b>and then worked out</b>		

Rachel is here summarizing the finding part of the Iwashita article, while Simon is retelling the methodology part in a chronological order. Combined, their efforts constitute dealing with major parts of the article, which helps all the students construct or reconstruct the target academic knowledge. This type of collaborative learning occurred in another topic floor, the Brown floor, where Rachel takes up findings and Sonia deals with conclusion of the article, which helps floor supporters Simon and Jasmine construct their academic knowledge.

The next example shows how students look at related but divergent aspects of the target knowledge without conflicting with one another. Simon, Rachel, and Sonia are on this floor, taking turns synthesizing the target academic knowledge (the Brown article) differently with their own personal knowledge/perspective resources. This large floor can then be captured as having three embedded floors, each having a different floor holder. Each embedded floor is numbered chronologically and shown individually (Embedded Floor 1 in Figure 7.17, Embedded Floor 2 in Figure 7.18, and Embedded Floor 3 in Figure 7.19). The whole floor is appended (Appendix 6):

Figure 7.17: Example of labour division; Embedded Floor 1

#	SIMON	RACHEL	SONIA
1		yeah	<b>conclusion is really, uhm,</b>
			<b>that, so, so there's two things that came out</b>
			<b>one is, uhm, you know how adequate is the training</b>
			<b>of, uhm, of the interviewers</b>
	IELTS people, yeah	yeah	
			<b>and, uhm, and the other one is, uhm, you know,</b>
			<b>how adequate are</b>
			<b>the definitions of the criteria if you like</b>
			<b>so this is really interesting, I think,</b>
			<b>'communicative competence or effectiveness</b>
			<b>is an abstraction</b>
			<b>that is rarely defined with any precision in terms of</b>
			<b>actual test performance'</b>
			<b>so that's, that's the real difficulties in, in assessing</b>
			<b>those subtleties,</b>
	mm mm		<b>those things we're just talking about,</b>
	mm mm		<b>uhm, because they play such an enormous part in</b>
			<b>communication and yet this system to assess them</b>
			<b>is,</b>
	mm, certainly you would, you want to rely on some sort of		<b>were different, this one</b>



In Embedded Floor 1 above (Figure 7.17), Sonia holds the floor to highlight what she has been discussing through this group discussion as to difficulties with speech assessment from the examiner's point of view. She strengthens her claim by referring to the conclusion part of the Brown article, reading aloud a quote from it. Then Simon moves to hold the floor in Embedded Floor 2 (Figure 7.18) without reacting directly to the previous floor by Sonia:

*Figure 7.18: Example of labour division; Embedded Floor 2*

#	SIMON	RACHEL	SONIA
2	<b>mm, certainly you would, you want to rely on some sort of</b>		were different, this one
	<b>some sort of, you know, test wide version of, test wide kind of</b>		
	<b>method of communication, test wide training that, that, and, you know, uhm,</b>		
	<b>some sort of regist-, maybe, not registration but, you know, having to meet that,</b>		
	<b>those standards every time you do interviews</b>		Mhm
	<b>or been, you know, peer assist or moderated or anything like that</b>		
	<b>just say that this, interviewers are always gonna act or we're gonna try</b>		
	<b>make all interviewers act in a certain way,</b>		,

	<b>rather than having them all act in different ways in giving different scores</b>	I think	Mhm
	<b>then it brings the, the reputability of the test, I think</b>	Yeah	
	<b>and disrepute you know</b>	I think probably Ian thinks that he is not allowed to give any kind of positive feedback,	

In his floor, Simon makes a general claim in his floor that across-examiner variation should be addressed in some way so that tests can have a decent reputation for its consistency. Rachel, then, moves to create the floor to share her view in Embedded Floor 3 (Figure 7.19):

*Figure 7.19: Example of labour division; Embedded Floor 3*

#	SIMON	RACHEL	SONIA
3	and disrepute you know	<b>I think probably Ian thinks that he is not allowed to give any kind of positive feedback, you know, otherwise it might be</b>	
	Mhm		
		<b>you know, misconstrued and Pam's sort of taking it as a different way</b>	mhm
	that's what I mean	<b>like she is going to kind of lead them through and see what she can get</b>	

		<b>and then, uhm, that kind of thing</b>	

In this embedded floor, Rachel does not directly react to either Sonia's or Simon's floor. She shares her personal interpretation on the way the examiners participating in the Brown research behaved in their IELTS speech examinations.

These three floors deal with different aspects of the same academic knowledge from the Brown article, seemingly never responding to one another in a true sense. Still, these different floors can be considered to be playing out in the same umbrella floor and thus captured as beneficial collaborative learning. This division of labour is beneficial because the target academic knowledge for this collaborative task is too large and complex to discuss within several minutes. It makes sense that different students focus on different aspects of the article and share them with others, which means they subdivide an umbrella floor into pieces of sub-floors, as Simon, Rachel, and Sonia do in this current example.

#### 4. Conclusion

To conclude the current analysis of the postgraduate students' collaborative learning in a peer discussion, four major findings are summarized. These findings were obtained through the proposed analytical method, *floor analysis*, and interpretative framework of students' *educational interaction resources*. Floor analysis was developed on the basis of Edelsky's (1981) concept *floor* and the model of educational interaction resources was grounded on the interview and discourse data.

Firstly, students engaging in educational peer interaction actively drew upon their own *educational interaction resources*, specifically, *domain knowledge resources*, *active learning resources*, and *linguistic resources*, which were identified in the previous chapter (Chapter 6). This means that they actively verbalized what they had as academic and personal knowledge and shared it among themselves to develop their learning. Especially sub-categories of active

learning resources, namely, *active knowledge use resources* and *active knowledge reception resources*, which were also found in the previous chapter, were important resources for students to exercise to make this collaborative learning feasible.

Secondly, a wide range of subtle functions were found in the implementation of *active knowledge use* and *active knowledge reception resources*. These functions are instrumental for nuanced developments in terms of multiple collaborative floor makings at different levels. The sub-functions of active knowledge use are identified as *academic knowledge sharing*, *personal knowledge sharing*, *claim* and *affective evaluation*. On the other hand, active knowledge reception resources include ten sub-functions, which were also found to be grouped into three categories, namely, *information transfer support*, *information content support*, and *perspective support*.

Thirdly, a wide range of individual differences were found in terms of the use of active learning resources as well as domain knowledge resources. It was suggested that the disparity among students in the implementation of these resources in educational peer interaction be looked at holistically in relation to other resources within students' educational interaction resources system as described in the previous chapter, which also involves language resources and social resources.

Lastly, a wide range of realizations of collaborative learning were identified as a result of exercising active learning resources. Students were collaboratively making different types of floor, where the use of active knowledge use and active knowledge reception resources is intersected to make collaborative learning occur in different ways. Three major categories of collaborative learning through floor makings were identified from the discourse data. The first collaboration category is made possible by floor supporter students' implementation of active knowledge reception resources. The second collaboration category occurred when multiple students brought along their personal knowledge/perspective resources together and use them actively, with the result that their perspectives are contrasted or conflicted with one another on the same floor. The other collaboration category occurs when each student individually makes their own distinctive floor, with the result that they collaboratively make an umbrella floor which addresses multiple different aspects of the target knowledge. While this type of interaction on the surface level appears divergent and not related enough to one another, still it was captured as

collaborative learning with sort of division of labour, given the complicated nature and sheer width and depth of the target knowledge.

## Chapter 8: Discussion

### 1. Introduction

The multi-method ethnographic approach of the current study explored the processes and dynamics of how different types of peer interaction opportunities are created and utilized in the postgraduate educational practices in a New Zealand university. A range of findings emerged through this research: (1) The target educational practices at postgraduate level in the three disciplines investigated, which are Applied Linguistics, Engineering, and Business School, were generally characterized by their active and collaborative learning environments, which make possible the creation and utilization of educational peer interaction. (2) Both the educators, such as the lecturers and program coordinators, and the postgraduate students contributed to the creation and support of the active and collaborative learning environments. (3) The lecturers contributed to the active and collaborative learning environments with their choices of a variety of learning mode options by requiring, encouraging, and accommodating the students' active and collaborative involvement in their own learning. Various contextual factors, including learning objectives, personal pedagogical beliefs, and socio-physio-temporal conditions, played out in the situational decision makings of the lecturers' choices of learning modes. (4) The postgraduate students contributed to the active and collaborative learning environments with their initiatives to take actions to open up interaction channels with the lecturers and their peer students to develop their own learning. The students draw upon a set of *educational interaction resources* in these initiatives, theorized to be composed of *domain knowledge resources*, *active learning resources*, *social relation resources*, and *linguistic resources*. (5) International postgraduate students encountered general shortage across these resources. Also, since they tend to find themselves with a different set of learning resources due to their previous educational experiences in their countries and regions, they usually need to make efforts to overcome their instilled learning resources and acquire active learning resources. And (6), *active learning resources* were further explored in the students' recorded conversation data, and their nuanced ways of using the resources and the sheer range of collaboration patterns were uncovered.

This chapter discusses the above-mentioned findings further, and the following points regarding the target educational practices and students' participatory behaviors will constitute the main threads of the discussion.

1. The complexity of active and collaborative learning environments of postgraduate educational practices
2. The agency of postgraduate students as active contributors to educational practices
3. International students' participation in the new educational practices

Further discussions of these points are important in the sense that the points combined are key to holistically and deeply understanding how postgraduate students are involved in the practice of active and collaborative learning in the postgraduate education and what could cause the identified behavioral difference in peer interaction between local and international students in the postgraduate educational contexts in a NZ university.

## **2. The complexity of active and collaborative learning environments in postgraduate education**

This ethnographic research into peer interaction opportunities in postgraduate educational contexts revealed that educational peer interaction is created and utilized in the educational practices characterized by their active and collaborative learning environments. Each of the investigated three disciplinary practices showed that it practices active and collaborative learning in its own way. The active and collaborative nature of postgraduate educational practices can be viewed in two ways, based on the findings of this research; (1) the sheer variety of interaction opportunities and (2) the dynamic, multi-faceted processes of generating the interaction opportunities. These reference points help understand the complexity of the postgraduate educational practices as active and collaborative learning environments.

## **2.1. The variety of interaction opportunities**

The postgraduate educational practices can be characterized by their sheer variety of interaction opportunities involving both hierarchical and peer interaction. Seven learning modes (lecture, interactive lecture, presentation task, in-class individual task, in-class group task, out-of-class individual task, and out-of-class collaborative task) were identified as being set up by the lecturer and course coordinator, and each learning mode had its own basic interactive configuration, that is, the pattern of who has speech rights and how participants are allowed to interact. For example, students are not allowed to suddenly start a conversation among themselves while the lecturer is speaking individually in Lecture Mode or interacting with another student in Interactive Lecture Mode. Learning modes, in this sense, afford and constrain students' creation and utilization of interaction opportunities. In addition to the default participatory configuration of each learning mode, students were also found to take initiatives to create and utilize alternative sorts of interaction channels that could help meet their emergent needs. To use the same situation mentioned above, students will start a conversation among themselves in a low voice, trying not to be heard by others, to address urgent needs even while the lecturer is speaking individually or interacting with another student. Within the affordances and constraints of learning modes set up by lecturers, students can thus voluntarily create a range of interaction opportunities as well. The current investigation, with a focus on peer interaction type, identified seven peer interaction categories in total, which are Covert, Voluntary, In-Presentation, Private, In-Class Task, Study Pair/Group, and Out-of-Class Task.

Unlike previous survey-based investigations into educational communicative events (e.g. Ferris & Tagg, 1996 a, 1996 b; Ferris, 1998), the current study did not pre-conceptualize categories of speech events but explored the three target research venues and confirmed and uncovered a range of learning modes in and outside of the classrooms. One of these identified learning modes, In-class Individual Task, has received little attention in previous literature and its accompanying peer interaction type, namely, Private, has not been paid attention to as a speech event. Private Type peer interaction occurs when students consult with each other for the processes and end products of a given task while they are supposed to be individually involved in the task. Genre theorists (Swales, 1996; Prior, 1998) recognized the existence of "occluded" genres, which are "genres that are not typically publicly shared" (Molle & Prior, 2008). The



identified In-class Individual Work and Private type peer interaction could well fit into this category.

Besides the variety of speech and interaction opportunities, this research has further identified the close connections between particular learning modes and peer interaction types. As briefly mentioned above, each learning mode affords and constrains interaction types that could occur. Each peer interaction type can then be interpreted to be closely connected to a particular learning mode as its condition. In this process of identifying the relationships, this research differentiates between Interactive Lecture Mode, which is usually termed as “discussion” (e.g. Mason, 1994) or “oral participation in class” (Ferris and Tagg, 1996 b), and its accompanying peer interaction type ‘Voluntary’, which Lemke (1982, 1990) pays attention to as “cross discussion”. This distinction is instrumental in analyzing the nature of classroom discussion. For example, the current data show that, while postgraduate students were observed to be actively interacting and having a discussion with the lecturer across the classrooms of Business School, no Voluntary Type peer interaction occurred in this discipline. This nature of classroom interaction or discussion was in stark contrast to the practices of Applied Linguistics and Engineering, where there occurred Voluntary Type along with hierarchical interaction in every classroom.

This identified connection between particular learning modes and peer interaction types confirms the construct validity of Bhatia’s “colonies” (2002), Swales’ “chains” (2004), or Molle and Prior’s “genre systems” (2008), all of which refer to the need to view communicative events holistically, rather than individually, as networks that will be meaningful to their participants. In the active and collaborative learning environments of postgraduate educational practices, both the lecturer and students might create and utilize different types of speech and interaction opportunities actively to address emergent issues in a given situation, with the former setting up learning modes and the latter responding to and modifying the learning conditions. As a result, there are intertwined learning modes and peer interaction opportunities as communicative events or genres, constituting a complicated system of communicative events which will holistically facilitate students’ learning development.

## **2.2. The multi-processes of generating the interaction opportunities**

Besides the sheer variety of interaction opportunities, the multi-processes of creating interaction opportunities add to the complexity of postgraduate educational environments. In active and collaborative learning environments, the educational interaction opportunities are created by the initiatives of both the lecturers and students. This argument of two types of social actors being involved in this process should be emphasized, because they act on different motivations to create and utilize interaction opportunities, which contributes to the complexity of active and collaborative learning environments. This complexity might then be interpreted to be more sophisticated in terms of accommodating students' various needs than the less complex system with just one type of social actor taking initiatives or authority to create interaction channels.

On the side of the lecturers who set up learning modes, a major finding is the existence of multiple causal factors that can impact their decision making processes on the choice of learning modes. These factors include disciplinary learning essentials, study-level-related learning essentials, students' existent knowledge and skills, class size and time constraints, and pedagogical beliefs and styles. These findings fit with the findings of the previous large-scale survey research of communicative events (Ferris & Tagg, 1996 a). Ferris and Tagg, with their focus on speech genres in university situations, found that the occurrences of speech event types (a whole class discussion, small group discussions, assessed peer work, and presentations) are holistically related to a set of contextual factors, such as discipline, class size, and lecturers' personal pedagogical styles. Both the results of the present study and Ferris and Tagg (1996 a) suggest there is a need to understand the complexity of educational practices in a particular situation and model them as systems determined by multiple, often interconnected, contextual factors.

This identified complexity of postgraduate educational practices means that postgraduate students might be required to engage in different sets of learning modes and accordingly different peer interaction opportunities in the same disciplines or even in the same subject, depending on their contexts and situations, while some level of orientation towards particular learning modes can be predicted on the basis of the analysis of contextual factors. For example,

in such a postgraduate program as MBA, which has strong educational attentions to the development of practical knowledge and skills required for managing a team of employees, students are expected to engage in collaborative learning modes, such as In-Class and Out-of-Class Collaborative Task modes. Still, other factors such as individual lecturers' pedagogical beliefs and classroom sizes impact on the choices of learning modes, and then there is naturally variation across classrooms in terms of actually how lecturers set up those collaborative tasks.

On the side of postgraduate students who utilize and can also modify and create learning modes, a major finding of this research is that students' existent personal resources can impact on their way of modifying, creating, and utilizing learning modes and peer interaction. Students' *educational interaction resources*, which are grounded on the findings through the qualitative analyses of student interview data, captures students' creation and utilization of interaction opportunities as results of their situated use of their available resources, which will afford and constrain any participation in interaction (see Table 8.1 below for a brief summary of these theorized interaction resource systems).

*Table 8.1: Students' educational interaction resource systems*

Category	Sub-category
Domain knowledge resources	Academic knowledge.
	Personal knowledge.
Linguistic resources	Listening related knowledge and skill.
	Speaking related knowledge and skill.
Social relation resources	Existent affective connections with participants in interaction.
	Skills at creating affective connections with other persons.

Learning resources	Context-specific learning resources (e.g. active learning resources in the active and collaborative learning environments in NZ).  Intercultural learning resources.
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The major components of the theorized resources systems cover fully what previous L2- or international student-related scholarly work has identified as factors that could impact on language learners' classroom interactional behaviors. *Domain knowledge resources* cover subject content knowledge's impact on participation in interaction (Morita, 2004; Lee, 2009) and includes *personal knowledge resources* which were not clearly addressed in the previous literature as an influential factor. *Linguistic resources* concern perceived language issues when speaking and listening (Ferris 1998; Lee, 2009). *Social relation resources* address social relation issues among students (Feak, 2013; Leki, 2001; Hendrickson, Rosen, & Aune, 2011; Rienties, Hernandez Nanclares, Jindal-Snape, & Alcott, 2013; Lee, 2009). Lastly, *learning resources* are concerned with international students' past educational experiences (Morita, 2004; Lee, 2009). The resources combined play out in complex ways in different situations with different individuals to make each case uniquely distinctive.

It should be noted that the educational interaction resources have not been theorized only to apply to NNSE international students but also can work as a framework that will help evaluate any student's potential in their active participation in educational interaction and discuss their performance. For example, an NSE international Engineering student from the United States mentioned encountering occasional problems with his linguistic resources when he was interacting with his student peers. The student identified different accents and speeds of speech as sources of the problems. As for social relation resources, NSE students referred to issues in social situations, saying that they sometimes felt shy when they spoke in a whole class discussion. These examples are only a few among many pieces of evidence from this study that the postgraduate students' interaction resources will constrain their participation in a new educational interaction such as postgraduate studies.

As discussed so far, the processes of creating and utilizing educational interaction opportunities in postgraduate educational contexts involve two different initiatives, namely, lecturers' choices of learning modes and students' negotiation of the learning modes, both of which contribute to the making of active and collaborative learning environments. The two initiatives do not work separately but are closely linked together to make a dynamic system, in the sense that lecturers set up different learning modes to pursue different educational objectives and then students negotiate and utilize them to fit their own needs. The lecturers and students act under the influences of different sets of contextual, situational, and personal factors. These dynamic, multifaceted processes of creating and utilizing educational interaction, together with the sheer variety of educational interaction types generated through those processes, constitute the complexity of active and collaborative learning environments of postgraduate educational practices.

The next section will highlight postgraduate students' agentic involvement in the identified complexity of active and collaborative learning environments, bridging to the section after, which will discuss international students' not unproblematic participation in the postgraduate educational practices.

### **3. The agency of postgraduate students as active contributors to educational practices**

As discussed in the previous chapter, the active and collaborative learning environments of postgraduate educational practices are not created by the efforts on the part of the educators alone, but postgraduate students are involved in the co-construction of the learning environment as a part of the complex system. In this section, postgraduate students' active involvement in the maintenance of postgraduate educational practice will be highlighted. The following three points in relation to the students' agentic learning management will be discussed:

- (1) Student-led creation of interaction opportunities
- (2) Active learning resources affording the student-led creation of interaction
- (3) Students' creation of their own learning space in peer interaction

### 3.1. Student-led creation of interaction opportunities

Postgraduate students negotiate given learning modes to fit their own needs and create different channels of communication, including the identified peer interaction types. The existence of this negotiation and creation means that students obviously exercise their own agency to manage their own learning development, rather than receiving information unconditionally or pursuing tasks merely following set procedures as instructed. They elicit, add, edit, validate, and confirm information given by the lecturer and other students in a proactive way in communication channels they create on their own.

Identified hierarchical and peer interaction opportunities are predicated on this proactive implementation of students' agency. For example, in small classroom settings in Applied Linguistics and Engineering, postgraduate students were observed to be negotiating Lecture Mode into an Interactive Lecture Mode. They did so by taking initiatives to make interactive moves, such as confirmation questions and elaboration requests, while the lecturer was speaking. This hierarchical conversation between the lecturer and a student was observed to develop further into Voluntary Type peer interaction, where students themselves tried to interactively sort out emergent problems among themselves, with a whole class (including the lecturer) listening to their conversation.

Hierarchical and Peer Interaction instances thus created by students' initiatives to solve emergent problems cannot be considered within the framework of the teacher-led discursive pattern identified by investigators into educational interaction in classroom contexts (e.g. Mehan, 1979; Sinclair & Coulthard 1975). In Mehan's and Sinclair and Coulthard's frameworks, classroom interaction is analyzed as a unit composed of a sequence of three consecutive stages (IRE/F = Initiation-Reply-Evaluation/Feedback) and this structure is initiated by the teacher who has particular pedagogical objectives. In this interaction structure, students are "delegated to the 'floor supporter' role" (Jenks, 2007) with limited room for initiatives. The finding from the current study, on the other hand, helps draw attention to students' own active involvement in managing their learning objectives. They initiated interaction on their own decisions with interlocutors including their peers as well as the lecturer as long as they perceived the interlocutors to be resourceful. Using the term in Wells (1993), which calls the IRE/F structure a

*micro-genre*, the current research identified different types of micro-genres, including student-led hierarchical interaction and Voluntary Type peer interaction.

As another example of students' proactive contribution to active/collaborative learning environment in the data set, in Presentation Task Mode in a course of Engineering, students were observed to create peer interaction opportunities (In-Presentation Type peer interaction) when listener students took actions to deal with what confused or interested them. The students were observed to be freely asking questions or giving comments in the middle of presentations. In the educational practice of this course, there was clearly a tacit consensus that students were allowed to join in to raise a question or give a comment on what the peer presenter just said. The students did not even have to wait to ask questions or make comments until the whole presentation ended, which is usually the case with the academic seminar presentation and discussion/question time (e.g. Querol-Julián & Fortanet-Gómez, 2012). The creation of this type of peer interaction was not directed by the lecturer but realized by the students' agentic choice.

These findings suggest that the practice of active and collaborative learning can be evaluated in terms of variation in students' involvement in negotiating learning modes. While educational practices might be characterized by the promotion of active and collaborative learning on the part of educators, this characterization can also be misleading, unless the nature of activeness in that context is considered in terms of whether it is either activeness as required in the form of lecturer-set tasks or activeness as based on students' agency. From these understandings, the postgraduate educational practices which the current study investigated can be described as a mixture of the two types of activeness, the practices of active and collaborative learning that are negotiated between both lecturers and students, rather than the practice which is only promoted by the educators.

### **3.2. Active learning resources affording the student-led creation of interaction**

Given postgraduate students' agentic contribution to the active and collaborative learning environments, essential resources for students to draw on in creating and negotiating interaction opportunities in educational contexts were identified and theorized to be *educational interaction*

*resources*. The resources consist of four components, *domain knowledge resources*, *linguistic resources*, *social relation resources* and *learning resources*. Among them, learning resources are contextually oriented, and the types of learning resources instrumental in the active and collaborative learning environments are termed *active learning resources*. The interview data show that local NSE students were perceived to be generally equipped, though perhaps to a varying degree, with active learning resources. Analyses of the interview and discourse data further found that active learning resources can be categorized into two distinctive pragmatic behaviors, namely, *active knowledge reception* and *active knowledge use*. Local NSE postgraduate students utilize these two functions as resources to proactively open up and participate in various educational interaction channels to manage and develop their existent knowledge and skills.

Active learning resources worked as an instrumental framework that helps understand in detail postgraduate students' initiatives to participate in educational interaction. Their discourse data was explored using this interpretative framework as well as the *floor analysis* method, and the complex, nuanced use of communicative functions were identified as sub-categories of active knowledge use and active knowledge reception (see Table 8.2 below).

*Table 8.2: Sub-functions of active knowledge use and active knowledge reception*

Active Learning Resource Category	Active Learning Resource Sub-category
Active knowledge use	Academic knowledge sharing
	Private knowledge sharing
	Affective evaluation
	Claim
Active knowledge reception	Backchannel
	Repetition
	Utterance completion



	Paraphrase
	Summary
	Information elicitation
	Information addition
	Information edition
	Agreement/disagreement
	validation
	Substitutive affective evaluation
	Substitutive claim

This list of sub-categories of active learning resources is not likely to be exhaustive, since the discourse data was obtained through a recording of postgraduate students' conversations while they were engaging in one task. The task was that the students were to talk about what interested them most about the required readings of three research articles. It is more than conceivable that yet another set of different sub-categories may be found in relation to different tasks that would involve different cognitive activities. Students' cognitive activities have been explored in the previous literature (Fink, 2013; Bloom et al., 1956; Anderson et al., 2001). Bloom, Engelhart, Furst, Hill, and Krathwohl's (1956) established a highly acclaimed framework for educational behaviors and communication to help educators identify different categories of cognitive functions to develop students' higher thinking, known as Bloom's taxonomy. While the original conception of the taxonomy has been developed in terms of a range of aspects since its publication (Forehand, 2010), a recent highly recognized revision by Anderson, Krathwohl, and Bloom (2001) classifies educational functions into a hierarchically layered system consisting of six cognitive activities, which are remembering, understanding, applying, analyzing, evaluating, and creating, from the bottom to top layer. While most of the higher-level functions of Bloom's taxonomy can be considered to be covered by the current framework of active learning, there was no identification of an equivalent to Bloom's "analyzing" category in the

discourse analysis in this study. In Bloom's taxonomy, analyzing is defined as a higher order of thinking employed to break down information into different parts while understanding the relation of them to one another and the whole, but no evidence of such a cognitive activity was available in the data of students' discursive functions. This lack of a type of high-order cognitive function in this particular communication is likely to be attributable to the nature of the authentic task given to the students who were recorded for the discourse data.

It should be emphasized here that, in peer interaction, there is no guarantee that use of the same set of identified cognitive and communicative functions can be observed in a different or even similar task. Students' situational use of agency will be unpredictable in terms of what sorts of cognitive mechanisms they want to draw upon for the task they are dealing with. In hierarchical interaction, on the other hand, teachers can take significant control of the floor and try to elicit their intended responses in the form of asking questions of students or directing them to engage in some activities. Some level of predictability for outcomes can be expected in this type of interaction from the teacher's perspective. While, at the level of postgraduate study, students are generally expected and actually able to show a command of higher cognitive functions in educational communication, students also draw upon their own agency for choices of higher order functions and responsive moves within the constraints of the nature of tasks they are given. Findings about variable use of active learning resources by a group of students engaging in the same task presents evidence for this argument. In the discourse data, four postgraduate students from Applied Linguistics showed how differently they made claims and evaluations, submitted evidence for the claims and evaluations, responded to the claims, and mutually supported the floors of one another (see Table 7.9 in Chapter 7, Section 3.2.). Arguably, complicated, mutual impacts of other educational interaction resources, such as domain knowledge, social relation, and linguistic resources, are also the cause of this variation, as suggested in Chapter 6.

### **3.3. Students' creation of their own learning space in peer interaction**

The last point to be made in the current discussion of the agency of postgraduate students is that students can create their exclusive learning space in peer learning mode. The analyses of

postgraduate students' group discussion suggest a possibility that students' behavior in peer interaction, where they are able to exercise their agency fully, might be distinct from the way they interact with the lecturers, who are supposed to take control of students' agency in terms of activities and topics. This understanding of students' behavior in peer interaction has come from the attention to how students' *educational interaction resources*, including *active learning resources*, *domain knowledge resources*, *linguistic resources*, and *social relation resources*, are playing out in the students' conversation discourse. The following subsections address how these resources might be more distinctively used in peer interaction than in hierarchical interaction.

### **3.3.1. Students' distinctive use of active learning resources in peer interaction**

The discourse data shows a possibility that postgraduate students might be utilizing their active learning resources in a distinctive way from the way they use the resources in hierarchical interaction. The two components of active learning resources, which are (1) *active knowledge use* and (2) *active knowledge reception*, are discussed here.

#### *(1) Active knowledge use; academic knowledge sharing*

Students' *academic knowledge sharing* as a subcategory of *active knowledge use* occurs when they refer to the target academic knowledge they acquired from their prior learning. This communicative act occurred in the discourse of postgraduate students' 18-minute peer interaction nine times, which constitutes one third of the total number of times of active knowledge use including other three sub-categories, namely, *personal knowledge sharing*, *claim*, and *affective evaluation* (see Table 7.9 in Chapter 7, Section 3.2. for details). This relatively high occurrence of active knowledge sharing in interaction can be interpreted in different ways. Firstly, this behavior might be due to lack of the lecturer's control of topics and actions in interaction. In students' interaction with the lecturer in Interactive Lecture Mode, the lecturer is supposed to be the one who informs the students and gives them the target academic knowledge, not the other way around. While students can negotiate the academic knowledge by asking questions and showing their comprehension and acknowledgement, this learning mode and its

default participative configuration will not allow the students themselves to have so many opportunities to show their academic knowledge to the lecturer and other students, unless the lecturer strategically tries to elicit the students' comprehension of the target knowledge interactively, as in the Initiation-Response-Evaluation/Feedback structure (Mehan, 1979; Sinclair & Coulthard 1975). On the other hand, the present discourse floor data shows that students were involved in academic knowledge sharing to set up conditions for their personal claim and for their affective evaluation of the target knowledge.

Secondly, the abundance of evidence of academic knowledge sharing in the discourse data from Applied Linguistics is partly understood to be due to the nature of the task recorded for data analysis. The students were asked by the lecturer to share what interested them most about the learning materials, which would be understood to entail specifically describing which part of the required readings interested them most. Students would then describe what the research articles said (= academic knowledge) and make some comments on that.

Thirdly, students might have been motivated to manage their interaction for better communication. They might have felt the need to take action to make the communication successful by establishing the secure common ground before going further into the discussion. The data shows that the students checked to see if the other members of the discussion group had read the targeted required article and found that not all necessarily had. To make sure that everyone in the group could follow the talk, then, the floor holder might take initiatives at first to share his or her comprehension of the contents of the research article he or she was going to deal with. While this management role is usually considered to be taken by the lecturer when the class is in Lecture Mode or Interactive Lecture Mode, students themselves need to manage this function on their own in a group discussion because of the absence of the lecturer.

## *(2) Abundance of active knowledge reception*

As for active knowledge reception as a component of active learning resources, there is a possibility that students might be involved in a much wider range of the functions in Collaborative Task Mode than they would in Interactive Lecture Mode. In Collaborative Task

Mode, each student's communicative floor was always supported by incessant flows of active knowledge reception functions of various forms, such as backchannels, repetition, utterance completion, paraphrase, and summarization. In Interactive Lecture Mode, on the other hand, this frequent use of active knowledge reception functions was not observed. No noticeable use of backchannels, repetition, utterance completion, paraphrase, and summarization was found in Interactive Lecture Mode, as it was found in the discourse data from Collaborative Task Mode. I would argue that this disparity in students' use of active knowledge reception resources between the two learning modes is not counterintuitive. Firstly, experienced classroom teachers would be able to make an informed guess of what it would be like for multiple students to choose freely to implement such nuanced functions as backchannels, repetition, utterance completion, paraphrase, and summarization at their discretion when the lecturer is holding the floor in class. Students learning in Interactive Learning Mode will naturally try to avoid using those nuanced supportive functions too much so that the impact of their active knowledge reception can be minimized to a reasonable extent. Secondly, students may be well aware that the lecturer is not supposed to be in a position to receive a lot of discursive supports from students. Unlike students who are constructing their knowledge by talking, the lecturers can talk quite fluently about what they are supposed to talk about. Students will not feel any need to discursively support the lecturers who are well-versed in academic topics.

### **3.3.2. Students' distinctive use of domain knowledge resources in peer interaction**

In terms of topic management, the Applied Linguistics postgraduate students in the peer interaction task were found to be 'free-flowing' in their discussion, without any consensus-making among interlocutors as to the structure, procedure, and agenda of the discussion. The students did not set aside any time either to prepare themselves for the task given, and perhaps due to the task nature (= talking on what interested them most about the three required readings), they were expected to freely express what they wanted to share with their peers. While most of the discussion stayed on the topics understood to be relevant to the expected learning objective, a significant portion of the discussion was identified by the current researcher to be possibly relevant but not necessarily important to the given task of discussing the research articles.

Obviously these students chose, whether consciously or unconsciously, to negotiate the task nature to pursue what emerged as interesting topics to them. Since the lecturer did not participate in the group discussion even as a listener, the absence of the lecturer in the collaborative learning afforded the students this opportunity to expand their off-topic discussion. In the case of Interactive Lecture, on the contrary, any diversion from the learning objective is highly likely, or expected to be, regulated by the lecturer who is supposed to be the floor holder in class at the deepest level. Students are also likely to be aware of this regulative system through their past experiences of institutionalized education, so their meta-cognitive mechanism is activated to self-regulate any possible off-topic move in Interactive lecture. In peer interaction, on the other hand, a lack of any such authoritative presence might constitute conditions for students to relax their self-regulatory system to negotiate their discussions and accommodate some degree of off-topic interaction.

### **3.3.3. Students' distinctive use of linguistic resources in peer interaction**

As for *linguistic resources* as a component of educational interaction resources, the analysis of the discourse of postgraduate students' peer interaction suggests that there is a possibility that students might feel allowed to behave in an even less formal fashion in collaborative learning conditions than in the presence of the lecturer. They might show less hesitation to make use of colloquial phrases in peer talk (e.g. "Far out, she must have slammed them", "yap", "that's disgusting, that's disgusting" in the current data) which might not necessarily be contextually appropriate to use in 'educational' settings.

### **3.3.4. Students' distinctive use of social relation resources in peer interaction**

The absence of the lecturer in peer exclusive interaction might influence the dynamics of interpersonal relationship among students in a group in a significant way. Students' social relation resources could be used differently in peer exclusive interaction from the way it can be in the interaction joined by the lecturer. For example, the peer exclusive interaction opportunities

might provide students with a more relaxing, supportive atmosphere which they might not expect in the presence of the lecturer so that they might feel allowed to talk candidly about affective aspects of learning experiences, such as heavy cognitive loads of reading difficult research articles. Also, its social setting requires each individual student to take on more responsibility and contribution to manage aspects of academic learning than they are expected to in a whole class setting (Dillenbourg, 1999; Johnson & Johnson, 1999). Each student is then technically required to take more actions across different communicative functions in a smaller group than they are in a larger group.

### **3.3.5. Students' learning space in peer interaction**

Considering the range of conditions and accompanying behaviors mentioned above, students can be understood to be creating their own exclusive learning space when they are engaging in collaborative learning in peer interaction settings, distinctive from other teacher-led or teacher-present learning modes. They are required and expected to take initiatives on a much wider range of communicative functions in relation to their academic development, as well as being able to appropriate the use of agency which would naturally be constrained by the presence of the lecturer. These conditions of their exclusive learning space can maximize their activeness in the use and reception of the target academic knowledge and their own private knowledge resources as well as their eagerness to use relaxing, informal language. Obviously, however, the degree to which students will actually perform these expected communicative functions in collaborative learning is unpredictable (Dillenbourg, 1999). Only as long as they are adequately equipped with a full range of interaction resources (= linguistic, social relation, domain knowledge, and active learning resources), can students' employment of those resources in collaborative learning generate learning space in which as great educational benefits are expected as the educational theorists advocate for (Remedios et al., 2008; Blasco-arcas et al., 2013; Draper, Cargill, & Cutts, 2002; Garrison, Anderson, & Archer, 2001; Dillenbourg, 1999). Otherwise, the nature of students' exclusive learning space could become educationally less beneficial with a possibility of going too much off topic or less substantial in information

content, for example, due to the absence of the management and control of activity and topic by the lecturer.

#### **4. International students' participation in their new educational practices**

The previous two sections have argued that the postgraduate educational practices in the NZ context can be characterized as their active and collaborative learning environments as complex systems with students, as well as educators, contributing to the construction and maintenance of these practices with their own agency. Within the affordances and constraints of learning modes the lecturers set up, the students pursue the learning objectives into their academic development, and in these processes, students actively create and utilize interaction opportunities, both hierarchical and peer, drawing upon their own agency. They thus need to be equipped with resources that accommodate the creation and utilization of educational interaction channels, including different types of peer interaction. For peer exclusive interaction, in particular, these resources can be used in a distinctive way from the way they are used in interaction with the lecturer.

In this section, the focus is on how non-native-speaker-of-English (NNSE) international students with different cultural backgrounds and limited second language competence relative to their native language competence can participate in, and thus contribute to, these existent educational practices in their new social environments. The following two points are discussed: (1) incongruence between needs and resources for NNSE international students, and (2) development of intercultural learning resources.

##### **4.1. Incongruence between needs and resources for NNSE international students**

Postgraduate students' interview data revealed that students, in general, were not necessarily equipped with the adequate resources for their full commitment to their new educational environments, and that this incongruence between the needs and resources could cause issues around their participation in both hierarchical and peer interaction in educational



contexts. While local NNSE or NSE students and international NSE students could also be under-resourced with domain knowledge and social relation resources, NNSE international students especially from Asian countries tended to be under-resourced more widely across educational interaction resources, namely, domain knowledge, social relation, linguistic, and active learning resources, as shown in Chapter 6. The current discussion first gives a particular focus on how the shortage of linguistic and active learning resources, among others, impact on NNSE international students' participation in active and collaborative learning environments. Then, NNSE international students' shortage of educational interaction resources is argued to become more problematic in peer exclusive interaction, in which local students can show their behavioral patterns distinctively from the way they do in the interaction with the lecturer.

#### **4.1.1. NNSE international students' shortage of linguistic and learning resources**

Firstly, as to linguistic resources, the argument should be made as a premise that listening and speaking are integrated and cannot be separately discussed (Mendelsohn, 2006). This means that issues with listening due to shortage of linguistic resources can cause issues with speaking in educational interaction. For example, interviewed NNSE international students found it hard to take the floor to speak up in peer interaction because of the difficulty they had in comprehending what NSE/local students were saying. Given this understanding of intertwined relation between listening and speaking, the data show that socio-culturally variable linguistic forms, such as local prosodic features and colloquial vocabulary were cited by the international students as potential sources of problems in linguistic resources. The international student interviewees, both NSE and NNSE, particularly mentioned that 'Kiwi' accents were tricky because they were not accustomed to them. This issue with local accents is consistent with previous findings of difficulties for international students in their interactions with local students (Kukatlapalli, 2016; Andrew, 2011; McGrath & Butcher, 2004). This series of findings seems to suggest that, as L1 learning is socio-culturally based (Vygotsky, 1978), so is L2 learning. In the learning of English as another language, learners are more familiar with some varieties, such as North American ones as the interviewees referred to, than they are to others. NNSE international students who came to New Zealand experienced the incongruence between their learned English variety as their linguistic

resources and the NZ local variety as needs. This shortage of linguistic resources then impacted on the international students' participation in peer interaction.

As for learning resources, international students, especially from Asian countries, were commonly found to be experiencing the incompatibility of their resources with the perceived needs in their new learning environments, and they attributed this incongruence to socio-cultural differences in terms of between their past and current experiences of educational practices. The resources required for active and collaborative learning environments in NZ, they perceived, were different from what were required in their home countries. For example, they said that they did not join in a conversation held between the lecturer and a student in a whole class discussion, because that participation could be against their cultural code of behaviors and interpreted as being rude.

This finding about the cultural difference in educational practice is also consistent with the relevant knowledge from previous research as to the impact of past educational experiences on international students' participation in interaction (Lee, 2009; Morita, 2004; Sit & Chen 2010). International students shifting across different educational practices always have some possibility of not being fully equipped with "knowledge and subtle skills of classroom interaction" (Morita, 2000, p.298) in the target educational practices. This issue around the resources for learning is obviously more complicated it seems, given that learning is mediated by language (Halliday, 1993; Vygotsky, 1987), that is, language plays a central role in learning. For NNSE international students, this means that shortage of learning resources for active participation in educational interaction might cause them many more challenges than could be imagined. If unfamiliar functions in interaction for learning are intricately bound with unfamiliar linguistic forms, for example, they would have very little clue even to figure out how they could participate in the ongoing interaction, however willing they might be to do so.

#### **4.1.2. NNSE international students' shortage of educational interaction resources in peer exclusive interaction**

Another argument around potential shortage of educational interaction resources is that NNSE international students might have additional burdens of having to strategically marshal

their limited resources to participate in peer exclusive interaction. Especially when local students dominate in number in a group for collaborative learning, the local students are highly likely to create their exclusive learning space, as discussed in the previous sub-section (Section 3.3.) and in that space they can show distinctive behaviours in terms of functions and linguistic forms, such as frequent use of supportive moves including repetition, paraphrase, and summary as well as intimate, colloquial form of speech. The local students might get more or less side-tracked in their management of topics to talk about something that they alone share among themselves in their own inner circle. In peer exclusive interaction, due to the absence of the lecturer, the students are naturally expected to take more responsibility and engage in a much wider range of communicative functions, thus taking more communicative actions in number than they do in teacher-led learning modes to create a complicated structure of discourse with multiple students' agencies. In this distinctive peer exclusive learning space, NNSE international students are likely to encounter the different sorts of structure of communication, topic, function, and linguistic form than they are familiar with in their experiences of interaction with the lecturer. Since peer-exclusive interaction opportunities are relatively less frequently encountered, the international students might not have sufficient exposure within a short term to the use of functions and linguistic forms peculiar to peer exclusive interaction. As a result, they might not be able to fully socialize themselves into those distinctive communication patterns in peer exclusive interaction. Naturally, then, they will tend to encounter more challenges in interaction for collaborative learning than they will in interaction led by the lecturer.

Unfamiliarity with different collaboration patterns in peer interaction, which were described in Chapter 7 (Section 3.3.), might also negatively affect the way international students participate in collaborative learning. The floor analysis found three major patterns in the students' collaboration, which are collaborative learning with (1) floor support, (2) differing perspectives, and (3) labour division. This coverage of discursive patterns in peer interaction is interestingly inconsistent with what education theorists identify as the development of beneficial talk patterns (see Table 8.3 below). Fisher (1993) and Mercer (1995) categorize peer interaction patterns into three types; cumulative, disputational, and exploratory. These three categories are thought to roughly overlap with floor support and differing perspectives of collaboration patterns found in the current study. In cumulative talk, as in the collaboration with floor support, interlocutors take the roles of floor holder and supporter in turn to build up and co-construct

meanings without challenges from one another. In disputational talk, speakers make their disagreement remain intact without accommodating interlocutor's challenges in any new way, as is case with the collaboration with differing perspectives. Exploratory talk, which is recognized by Fisher (1993) and Mercer (1995) as educationally more meaningful, is supposed to be the reconciliation of elements from cumulative talk and disputational talk into a positive form. This talk pattern is characterized by negotiation and modification of ideas and perspectives through the course of interaction, which “offers a potential for learning not obvious in the other two types” (Fisher, 1993, p.25).

*Table 8.3: Comparison of the speech patterns in Fisher (1993) and Mercer (1995) and the collaboration patterns in this study*

<b>Framework</b>	Fisher (1993) and Mercer (1995)	This study
<b>Categories</b>	Cumulative talk	Collaboration with floor support (information transfer support and information content support)
	Exploratory talk	Collaboration with floor support (perspective support = claim support and affective evaluation support)
	Disputational talk	Collaboration with differing perspective
	NA	Collaboration with labor division

In the framework of Fisher (1993) and Mercer (1995), obviously, ‘labor division’ type of collaboration, which is the other collaboration pattern identified in the current study, is not

clearly dealt with. In the ‘labor division’ type of collaboration, found in the current data, students do not directly build up on the previous floor’s proposition. Instead, the students discuss in turn what they want to discuss, and they do so with or without support or challenges from other students. Thus, in this type of collaboration, the students touch on different aspects of a complex phenomenon that cannot be covered single- or even multi-handedly. In the current discourse data, a floor was identified in which three students took turns and talked about different aspects of a required reading dealing with the reliability of an internationally-recognized English speaking test in terms of variation across examiners. The first speaker student in this floor addressed the practicality of speaking tests in general from an examiner’s perspective, the second talked about the implication of the research article’s findings from the testing organization’s standpoint, and the third made a guess about the cause of the variation identified in the research article. These three points combined contributed to helping the students in peer interaction understand the complex target academic knowledge better in the way each student would not be able to deal with single-handedly.

The identified collaborative patterns in this research, as well as the talk patterns of Fisher (1993) and Mercer (1995), generate an understanding of how variable and complex the communication can be in a peer interaction situation. Without much exposure and direct experience of this variability and complexity, then, participation in peer interaction would not be so easy for students. In this sense, international students, especially from Asian countries, with their limited previous experience of active and collaborative learning are highly likely to struggle with resource shortage to deal with the dynamic aspect of peer exclusive interaction. In their “Confucian-heritage learning culture” (Watkins & Biggs, 1996), the setting of learning mode is highly oriented towards information transfer from experts, and students in the classroom are expected to listen attentively to the teacher and engage with the content intellectually (Ma, 2008). Their teacher-led interaction structure in the classroom learning (e.g. Mehan, 1979; Sinclair & Coulthard 1975) is likely to be naturally much simpler than the identified dynamism of peer exclusive interaction in the active and collaborative learning environments.

This section has discussed various aspects of the resource shortage in educational interaction that the NNSE international students who participated in this research experienced in the active and collaborative learning environments of the postgraduate educational practices in

NZ. A question emerging here is, how NNSE international students actually addressed the kinds of resource shortage they experience in their new learning environments. The next section will offer a discussion of the development of *intercultural learning resources* as an essential component of learning resources required for international students from different educational practices.

#### **4.2. International students' development of intercultural learning resources**

In this section, international students' development of *intercultural learning resources* is discussed in relation to the identified resource shortage mentioned in the previous section. *Intercultural learning resources* are constructed as essential resources that international students need to be equipped with to overcome their shortage of learning resources necessary for new learning environments. In the case of the current study, Asian international students from different educational practices were found to need *intercultural learning resources* to socialize themselves into the active and collaborative learning environments in NZ, which they had not encountered in their own countries (see details of the findings in Chapter 6 Section 4.4.3).

*Intercultural learning resources* can be discussed in relation to “intercultural competence” constructed in the previous literature (Byram, 1997; Hammer, 2012, 2013; Deardorff, 2006). Intercultural competence refers to “the capability to accurately understand and adapt behavior to cultural difference and commonality” (Hammer, 2012). *Intercultural learning resources* for international students in this research can therefore be recognized as resources which are specific to learning contexts which operate as a part of students' intercultural competence mechanisms.

The development of *intercultural learning resources* is considered to constitute at least two stages in which they show distinctive behaviors. At the first stage, students' intercultural learning resources help them notice differences in educational practices and/or identify potential or actual sources of problems with full participation in the new practices. This critical reflection leads to international students' shift in belief, action, and identity (Weimer, 2002). In the current data, all the international student interviewees noticed differences between their previous in their home countries and new educational practice in NZ, which represent evidence that they were equipped with this stage of intercultural learning resources.

At the second stage, intercultural learning resources involve decision-makings and actions for problem solution or avoidance, and the international students showed great variation here in the way of negotiating their learning. For example, one international student from China shared his observation that his fellow Chinese international students tended to decide to stay within their comfort zone without venturing out into exploration of new learning resources. According to this international student, Chinese students generally would not ask questions in class in front of other students but would go to the lecturer during the class break or privately communicate to solve issues. On the other hand, another international student from Indonesia noticed that, in the active and collaborative learning environments, students were allowed to be as active as they would like to, and that she actually tried to say whatever she had to say in spite of her perceived shortage of linguistic resources, specifically, grammatical correctness in her spoken language. Thus, international students' actual decisions on actions for learning in given situations varied, even though all the international students showed awareness of intercultural differences between educational practices through their critical reflection.

Students' implementation of intercultural learning resources can also vary in coordination with other types of *educational interaction resources*, which includes *domain knowledge*, *linguistic*, and *social relation resources* (see Chapter 6, Section 3.2. for the framework of educational interaction resources). For example, international students can notice how they are short of the resources required in the active and collaborative learning environments and start to develop the required learning resources while actually participating in educational interaction, drawing upon other types of resources. In the case of the Indonesian international student as mentioned above, the data show that her existent *social relation resources*, specifically, her newly established comfortable relationship with other students in the same postgraduate program, helped her deploy her intercultural learning resources to their full potential to develop the active learning resources expected in her new educational practices. Without these social relation resources, she might have had more difficulty in exercising her international learning resources fully because she was also short of the linguistic resources as she perceived. On the other hand, in the case of the Chinese international student, also mentioned in this section, he suggested that, due to issues with his linguistic resources, specifically, his lack of fluency in spoken English, he was not able to participate in active learning practice even though he tried to do so by drawing upon his international learning resources. How intercultural learning resources

will work, thus, has to be considered in relation to other types of resources, as the components of educational interaction resources are intertwined, mutually complementing or aggravating, holistically determining on how international students will behave in given situations. International students' participation in the active and collaborative learning environments of the postgraduate educational practices in NZ, therefore, need to be understood as a collective result of their situational decision makings in interaction opportunities, afforded and constrained by the dynamic system of their educational interaction resources.

## **5. Chapter summary**

This chapter has discussed the processes and dynamics of the active and collaborative learning environments of the postgraduate education in a NZ university, the resulting variety of communicative events, the contribution that postgraduate students can make to the active and collaborative learning environments, and the behavioral differences in peer interaction between local and international students due to available resources. To conclude this chapter, major arguments made so far are summarized.

Firstly, the active and collaborative nature of postgraduate educational practices were argued to be captured as a complex system, and the sheer variety of interaction opportunities and the dynamic, multi-faceted processes of generating the interaction opportunities were discussed. In the postgraduate educational practices investigated, the learning environments are co-constructed and maintained by both educators and students. While educators set up different learning modes as active and collaborative learning environments, students also contribute to creating the active and collaborative learning environments, as active, agentic participant/negotiator of the learning conditions, as opposed to passive participant and task-doer. As a result of these two different lines of contributions, the teacher-set learning modes and student-initiated interaction opportunities make a complex system of communicative events that will meet students' various learning needs. On the other hand, the processes of the lecturers' choices of learning modes and students' creation and utilization of interaction opportunities are influenced by different sets of contextual and situational factors respectively. Postgraduate students' participation in educational interaction are understood as a result of their deployment of



*educational interaction resources*, which constitute domain knowledge, linguistic, social and learning resources as sub-categories. The components of educational interaction resources holistically impact on students' interactional behaviors in given situations.

Secondly, the postgraduate students' agency to contribute to the active and collaborative learning environments was emphasized in relation to the student-generated peer interaction opportunities, which include the "occluded" (Swales, 1996) types of peer interaction, such as *Voluntary Type* and *In-Presentation Type*. The concept of *active learning resources* was proposed to explain their self-management of learning development, which makes active and collaborative learning, and the variety and range of sub-functions of active learning resources were presented. Also, it was argued that postgraduate students can use their available resources to meet their perceived needs and create their own learning space in peer exclusive interaction in the absence of the lecturer, where they show the learning behaviors and communicative functions distinctive from those commonly observed in teacher-led interaction.

Lastly, it was argued that NNSE international students tend to be under-resourced for their participation in educational interaction, which leads them to experience challenges in the adaptation to the new educational practices. How the shortage of linguistic resources and active learning resources would affect students' participation in educational interaction received a particular focus. Another argument here was that peer-exclusive interaction may particularly cause NNSE international students additional challenges. In their own exclusive learning space, NSE local students can show their distinctive behaviors and NNSE international students' educational interaction resources may not easily cope with those unfamiliar behavioral patterns. To overcome these sorts of resource shortage and acquire the new learning resources expected in the new environments, international students need to develop a sort of meta-learning resources termed as *intercultural learning resources*. It was also argued that NNSE international students' implementation of intercultural learning resources in a particular situation needs to be holistically viewed in coordination with other types of educational interaction resources, namely, domain knowledge, linguistic and social resources.

Overall, NNSE international students' participation in peer interaction opportunities in the active and collaborative learning environments was argued to be better understood in consideration of how the dynamic, complex system of the learning environments is constructed

and negotiated by the lecturer and local students, and how the students draw upon their own resources in their part of contribution to the learning environments as creators and users of interaction opportunities. The behavioral difference between NNSE international and NSE local postgraduate students in peer interaction was thus explained as the difference in the resources available, which are intertwined to influence the students' decision makings on their creation and utilization of peer interaction opportunities in given situations.

## Chapter 9: Conclusion

This chapter concludes the whole thesis. It begins with summaries of the findings and discussions in the form of answers to the research questions. Then it suggests practical contributions of the current study to the EAP practice. The limitations of this research will also be discussed and suggestions will be given as to the future development of the research into educational practices that will inform EAP learners and practitioners further.

### 1. Answering the research questions

The current study has been guided by the three research questions raised in Chapter 2. The first question was raised with a focus on the identification of peer interaction opportunities as communicative events in postgraduate educational practices:

*Research question 1: What types of peer interaction opportunity occur in postgraduate educational environments and how differently might they occur across disciplines?*

Seven types of peer interactions were identified through the measures of ethnographic observations of postgraduate classrooms and interviews with lecturers and postgraduate students. These seven types of peer interaction are Covert, Voluntary, In-presentation, Private, Task, Out-of-class Task, and Study Group. Each of these peer interaction categories appear to be closely linked to a particular communicative event in the educational contexts. These events are referred to as learning modes in the current study and seven corresponding learning modes were identified in this study. These seven are: Lecture, Interactive Lecture, Presentation Task, Individual Task, Collaborative Task, Out-of-class Collaborative Task, and Out-of-class Individual Task.

This framework of educational communicative events is presented in the thesis as a way to examine peer interaction in three disciplinary areas of postgraduate studies: Applied

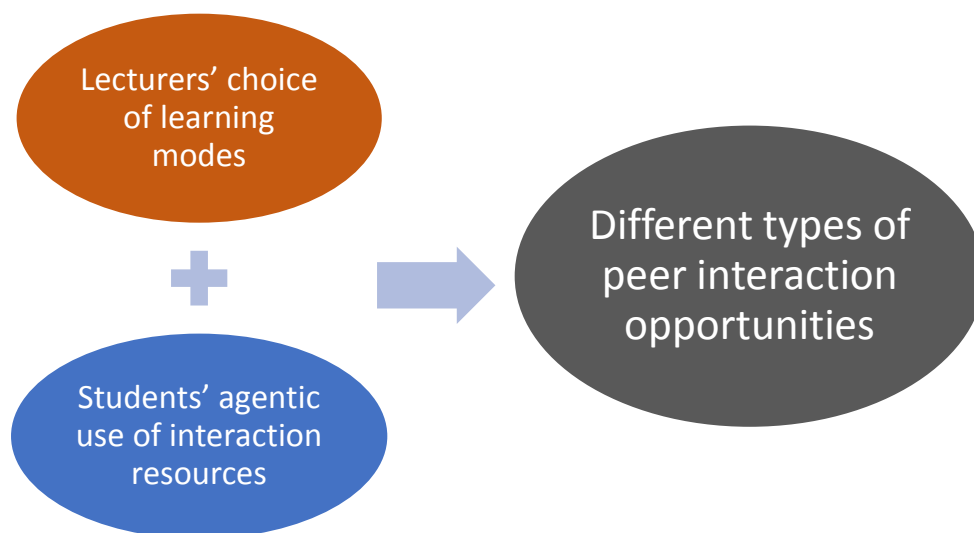
Linguistics, Engineering, and Business School. The results show, as their general characterizations, that Applied Linguistics has a distinctive orientation towards the Task and Voluntary types, that Engineering sees more opportunities for Voluntary and Out-of-class Task, and that Business School was found to have students engaging more in the Private and Out-of-class Task types of peer interaction in the observation and interview data. These results suggest each discipline practices their own system of providing interaction opportunities as communicative channels for learning.

The second question was to explore the processes of the generation of the identified peer interaction opportunities in the postgraduate educational practices:

*Research question 2: What factors can be involved in the creation and utilization of peer interaction in postgraduate educational practices across disciplines?*

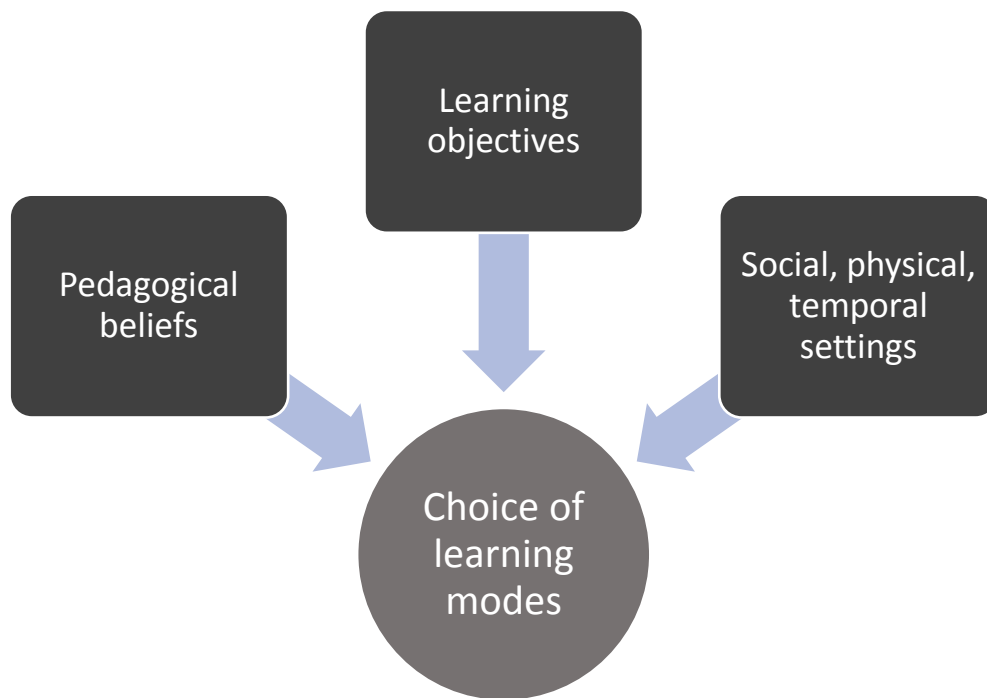
The creation and utilization of peer interaction was collaboratively achieved by the lecturer and students (Figure 9.1). These stakeholders are subjected to different sets of factors that could impact on their decision makings on teaching/learning actions.

*Figure 9.1: Creation and utilization of peer interaction opportunities*



On the side of the lecturers, they play a role of setting up conditions for educational interaction in the form of learning modes. In this process, three general factors were identified as potential influences on their decision makings in the choice of learning modes, which were (1) the learning objectives in relation to the essentials of the subject matter and to their students' current knowledge/skill resources and future target situation, such as academia or the work place, (2) their pedagogical beliefs, and (3) the socio-physico-temporal conditions of their teaching situations (Figure 9.2).

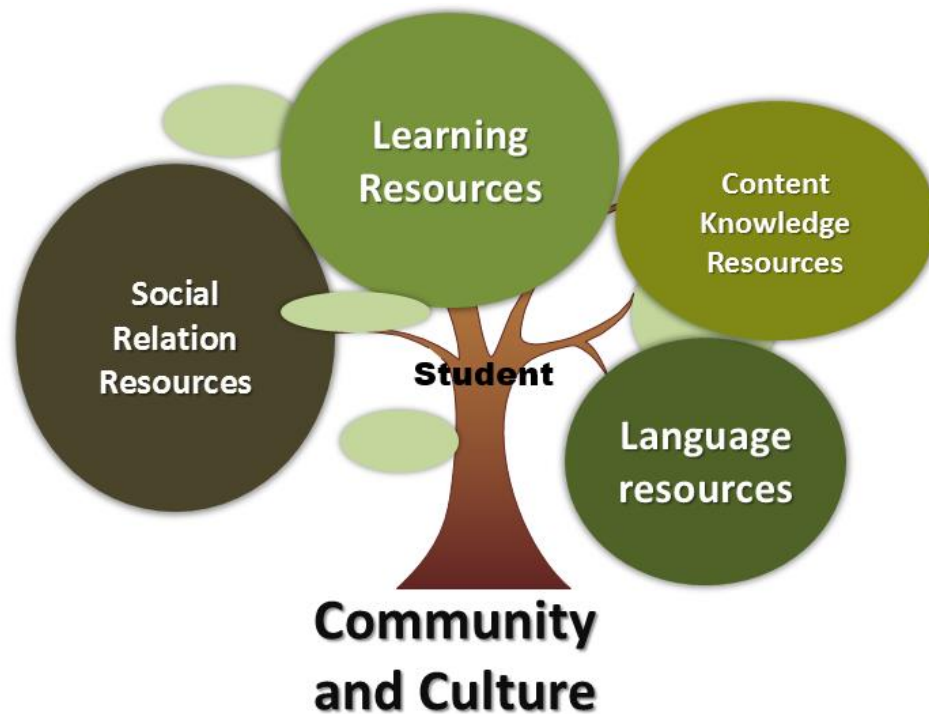
*Figure 9.2: Lecturers' decision makings in the choice of learning modes*



On the side of the postgraduate students, they negotiate learning modes, create necessary interaction channels, and draw upon their peers, if needs arise, as resources for learning. In this process, the factors involved in the students' agentic creation and utilization of peer interaction opportunities are explained with the model of *educational interaction resources*. The model is composed of (1) *domain knowledge resources*, including academic knowledge and private knowledge/experiences, (2) *social relation resources*, such as existent friend/acquaintance

networks and personal social skills, (3) *linguistic resources*, which are socio-culturally based, and (4) *learning resources*, such as familiarity and competence with educational practices in a given context, which were identified as culture-driven (Figure 9.3).

*Figure 9.3: Postgraduate students' educational interaction resources*



In essence, influential factors on educational peer interaction opportunities constituted an intertwined, complex system. No single constituent of the factor systems on either the teacher's or student's part could be considered to be wholly responsible for the creation and utilization of educational peer interaction. For example, the lecturer may set up Interactive Lecture Mode, expecting active classroom discussions among themselves to happen, in consideration of discipline-related factors, such as the learning essentials of their course. On the other hand, students may notice that the given topic in the discussion is far above their domain knowledge resources, so that they decide to elicit more information from the lecturer as an expert of the academic knowledge. As a result, interaction may just occur back and forth between the lecturer

and students, without the students taking initiatives to create Voluntary Type peer interaction in the classroom discussion.

Lastly, the third research question concerned students' actual performances in peer interaction opportunities in terms of communicative functions:

*Research question 3: How do postgraduate students use their communicative competence in a peer discussion for their active and collaborative learning?*

As to the aspect of collaborative learning in peer interaction, the discourse analysis of four Applied Linguistics postgraduate students' conversation in a group discussion task revealed that their collaboration was realized in three different patterns. The first pattern of collaboration is that one student holds the floor to pursue his or her communicative purposes while other students give their support to the floor in various ways. Types of peer support include confirming understanding, validating the speaker's statement, adding some new element to and/or editing what the speaker is saying, and acknowledging the speakers' claim and affective attitudes. The second pattern of collaboration involves multiple people holding independent floors to share conflicting views. They thus learn multiple different perspectives around the same topic, which would be impossible when one floor holder is basically supported by all the others without any conflict of interest. The third pattern of collaboration is that students take turns talking about different sub-topics of the same general topic, collectively addressing multiple aspects of a complex entity or phenomenon.

These identified patterns of collaboration are predicated on students' initiatives to share their domain knowledge and elicit information from one another. The discourse analysis identified a wide range of nuanced communicative functions as students' efforts to actively use and receive various forms of information. These functions were presented as components of *active learning resources*, which are required when students participate in and contribute to the active and collaborative learning environment of postgraduate educational contexts (see Table 9.1 below). For example, students were found to be actively demonstrating their comprehension of the target academic knowledge acquired through readings (*academic knowledge sharing*),

sharing their personal knowledge gained through their experiences outside the academia (*private knowledge sharing*), and making claims and evaluations while drawing upon their personal perspectives (*claim and affective evaluation*). Also, they were identified to be actively supporting their peers' floors, showing their understandings and acknowledgements (*information transfer support*), negotiating the information content when students were receiving it from their peers (*information content support*), and sharing the perspective of the floor holder (*claim and affective evaluation support*)

*Table 9.1: Communicative functions in peer interaction as components of active learning resources*

		Communicative function type	
		Active Knowledge Use (Floor holder's function)	Active Knowledge Reception (Floor supporter's function)
Topic type	Academic Knowledge	Academic knowledge sharing	<ul style="list-style-type: none"> <li>• Information transfer support (<i>repetition, utterance completion, paraphrase, summary</i>)</li> <li>• Information content support (<i>addition, edition, elicitation</i>)</li> </ul>
	Students' Private Knowledge	Private knowledge sharing	<ul style="list-style-type: none"> <li>• Information transfer support (<i>repetition, utterance completion, paraphrase, summary</i>)</li> <li>• Information content support (<i>addition, edition, elicitation</i>)</li> </ul>



		Claim	<ul style="list-style-type: none"> <li>• Claim support</li> <li>• Information transfer support (<i>repetition, utterance completion, paraphrase, summary</i>)</li> <li>• Information content support (<i>addition, edition, elicitation</i>)</li> </ul>
		Affective evaluation	<ul style="list-style-type: none"> <li>• Affective evaluation support</li> <li>• Information transfer support (<i>repetition, utterance completion, paraphrase, summary</i>)</li> <li>• Information content support (<i>addition, edition, elicitation</i>)</li> </ul>

The answers to the three research questions, over all, disclose the sheer variety of interaction opportunities created by the lecturers and students, the active involvement of students in the processes of generating interaction opportunities, and their nuanced use of a wide range of communicative functions in different collaboration patterns. These findings constitute pieces of evidence that could help understand the nature of the postgraduate programs of the three investigated disciplines, namely, Applied Linguistics, Engineering, and Business School in a NZ university as *active* and *collaborative learning* practices (Bonnell & Eison, 1991; Prince, 2004; Drake, 2012; Dillenbourg, 1999). This understanding was also confirmed in triangulation with the interview data from international students from Asian countries who pointed out differences in educational practices between their previous and current experiences. To overcome these perceived differences in educational practice and participate actively in collaborative learning in their new environments, NNSE international students needed to acquire a new set of learning

resources, which include the sort of *intercultural competence* (Hammer, 2012, 2013; Bennett & Bennett, 2004; Deardorff, 2004) which is sensitive to the nature of both the previous and new environments and communicative competence required for the active and collaborative learning practices.

## **2. Practical implications**

The current study originates in the motivation to inform EAP practices in terms of how language learners can understand the importance of participation in peer interaction opportunities for access to collaborative knowledge construction. Admittedly, participation in peer interaction is very often optional and students can utilize other channels of learning, such as consulting lecturers during office hours and individual learning, to achieve their learning goals or to compensate for missing out on peer interaction opportunities. I have taken the stance, however, that international students can add another learning channel to their existing resources if they become actively involved in creating and using peer interaction opportunities for their own learning. International students can also contribute all the more to educational practices in the target situation by their active involvement in collaborative learning.

The knowledge and understandings gained from the current study have a range of implications for EAP learners who aim to go on to postgraduate level study, as well as for EAP practitioners who scaffold their students' English learning with empirically based curriculum and materials. In this section, the implications will be made in terms of (1) awareness of the target educational practices, (2) knowledge of essential resources for active participation in interaction, (3) development of the communicative competence specific to peer exclusive interaction, and (4) development of learner autonomy in the target situation. Let us look at each of those points in turn.

## **2.1. Awareness raising of the target educational practices**

Empirical evidence gained from this research shows that the nature of the postgraduate-level educational practices in Applied Linguistics, Engineering, and Business School of a NZ university can be captured as active and collaborative learning environments where interaction is a major vehicle for learning development. This holistic awareness of expectations and requirements in the target situation will benefit EAP learners greatly in their preparation for the target language use. Especially for EAP learners whose cultural practices might not so easily accommodate their active involvement in educational interaction, it is important to know any intercultural difference in educational practices and its possible consequences for aspects of their learning. EAP practitioners can, for example, facilitate this learning process by inviting guest speakers from different disciplines to talk about how postgraduate students are expected to learn in their disciplines and what consequences are likely to await those who fail to meet the expectations. Given that socialization into any new practice is likely to take a fair amount of time, EAP learners also need to know what the socialization processes could be like and how much time and effort it could take to address the cultural differences. EAP practitioners can help EAP learners with this awareness raising, for example, by inviting the current or previous international postgraduate students to talk about their experiences of the socialization processes.

The practical implication from this research also involves the description of the practiced active and collaborative learning in the forms of an inventory of communicative events. The seven learning modes identified in this study (Lecture, Interactive Lecture, Presentation Task, Individual Task, Collaborative Task, Out-of-class Collaborative Task, and Out-of-class Individual Task) as well as the corresponding seven peer interaction types (Covert, Voluntary, In-Presentation, Private, In-Class Task, Out-of-Class Task, and Study Pair/Group) can constitute the framework for designing discussions and tasks to facilitate socialization into active and collaborative learning. For example, the framework can be referred to as topics for EAP students' discussions to identify cultural differences of educational practices and behavioural patterns. Voluntary Type peer interaction in relation to Interactive Lecture Mode should be an interesting topic among other communication patterns, as international students from Asian countries in this research clearly pointed out that cultural codes would hinder them from creating such an interaction type. Also, EAP practitioners can create authentic academic tasks drawing

upon the framework of communicative events, setting up communicative conditions under which their students will develop awareness of communicative functions required in a particular learning mode as well as language use for the speech functions.

EAP learners also will greatly benefit from the understanding of the processes of generating the communicative events in active and collaborative learning practices. EAP learners' socialization into their new educational environment will be facilitated when they understand that lecturer's choice of learning modes in postgraduate educational contexts can be influenced by contextual, situational and personal factors. Specifically, the present research identified three general categories that can impact on the choice of learning modes on the lecturers' part, which are *learning objective*, *socio-physio-temporal setting*, and *the lecturer's personal pedagogical beliefs*. Among these influences, the learning objectives of postgraduate courses particularly deserve EAP learners' and practitioners' attention. At postgraduate level, the learning objectives are often determined in relation to the characteristic nature of activities expected or required in the future academic or professional situation after postgraduate studies. The lecturers choose learning modes that reflect those considerations. For example, the educators in some sub-disciplines of Engineering and Business School set up Out-of-class Collaborative Tasks so that their postgraduate students will have opportunities to acquire substantial communicative skills that will be essential in the team working environments in a professional situation. Also, the lecturers in Engineering set up Interactive Lecture Mode for their students to discuss aspects of academic research articles under their guidance, so that the students can develop critical understandings of the target academic knowledge which are essential for their future research. Helping understand the generative processes of each learning mode to this extent is expected to promote EAP learners' socialization processes greatly. Given their potential linguistic challenges, anticipated cognitive loads of postgraduate academic activities, and actual time constraints, awareness of the target educational practices is desirably raised up earlier rather than later.

Lastly, and perhaps most importantly, it is essential that EAP learners understand how students themselves can actually contribute to the active and collaborative learning environments of postgraduate educational practices. EAP students from educational backgrounds in strong Confucian traditions, for example, may need to be given extra support to learn how they can

make contributions to the target educational practice as members of the community. They need to be informed that, while the lecturers and course coordinators set up the basic format of learning in the form of learning modes, students are also afforded to negotiate the learning modes, as well as equipped with autonomous resources to give to other students. They need to be aware of their expected roles in the educational practices that are collaboratively maintained by every stakeholder. Again, the framework of communicative events, which contains seven learning modes and seven corresponding peer interaction types, can be a powerful tool to acknowledge students' contribution to the active and collaborative learning environments. Referring to the framework, EAP learners will learn how students can take initiatives to negotiate a given learning mode. For example, they can learn how Out-of-Class Individual Task Mode, such as doing an assignment, can be negotiated into Study Pair/Group type of peer interaction by students in the active and collaborative learning environments. To make this learning happen in an EAP program, local students and/or previous EAP learners who actually do study group activities may be invited to share their experiences of their study group. Awareness of these interrelated learning activities will be further raised if the reference to the framework is accompanied, for example, by students' discussions on what the advantages and disadvantages of these communicative events are and how they can complement each other.

## **2.2. Knowledge of essential resources for active participation in interaction**

The above-mentioned awareness of the general nature of the target educational practices and students' roles is expected to accompany knowing what different factors can make students' participation feasible in the target communicative events. The proposed framework of *educational interaction resources* will be instrumental on this score. This framework is composed of four different resource types, which are *linguistic resources*, *domain knowledge resources*, *social relation resources*, and *learning resources*.

First, about linguistic resources, it would be essential for EAP learners to know that two sub-categories of these resources, listening skills and speaking skills, will work together in interaction, not separately, and that listening resources will be important as speaking resources as well. For example, if EAP learners' listening resources are not enough to catch and understand

what local students are saying, they cannot participate appropriately in the ongoing conversation. In this research, familiarity with local accents was found to be an essential listening resource for international students. EAP practitioners are expected to attend to this socio-linguistic aspect of the target language use, by exposing EAP learners fully to local varieties of English in the target educational contexts and raising their awareness of different varieties of English.

Secondly, domain knowledge resources will be essential for interaction to the extent that the general nature of postgraduate learning as active use of higher cognitive functions naturally requires postgraduate students to synthesize their obtained academic knowledge and personal knowledge/perspectives/skills. EAP learners should be encouraged to practice using their domain knowledge through tasks. For example, they can be asked to read materials and orally describe the academic knowledge obtained from the materials in a form of summary. Then they can be asked to tell their own personal knowledge and/or perspectives relevant to the academic knowledge. Thus EAP learners will practice the use of different knowledge resources and synthesis of them, which they are likely to experience in various learning modes in postgraduate educational contexts.

As for social resources, EAP practitioners and learners need to confirm that, in the educational practices of active and collaborative learning, learning is emphasized to be a social activity, not just an individual pursuit for one's own academic success, and that it is mediated by interaction among people with implications of mutual influences. Social environments and relationships naturally influence one's way of learning. Socio-affective strategies to establish an empathy among students are expected to be paid due attention to in EAP curriculum. EAP practitioners can set up conditions for EAP learners to discuss their experiences of having difficulty, for example, in speaking with someone who they did not know very well, or having active exchanges of ideas and perspectives drawing upon their comfortable relationship with someone, or processes of establishing a solid relationship that facilitated them in talking comfortably.

Lastly, as for learning resources, EAP practitioners could remind their students that the general nature of postgraduate learning as active use of higher cognitive functions, as opposed to passive reception of academic knowledge, will entail more opportunities for students to interact with the lecturers and among themselves. Knowledge and skills for use of varieties of the

cognitive functions, namely, active learning resources, can be important for participation in educational interaction at this level of study. EAP learners may then be asked if they are familiar and well versed with the use of the higher cognitive functions, including what is often understood to be critical thinking, and, if they are not, they should have enough practices until they get accustomed to these functions. EAP practitioners are also expected to let EAP learners know that, since knowledge can be co-constructed among students, they can actively contribute to this knowledge co-construction process when they play a role of listener. EAP learners should be made aware of the existence of a range of active knowledge reception resources, such as repetition, summary, validation, and substitutive claim, and also of how actually these functions can be used through exposure to authentic conversations among native-speaker-of-English students.

With the proposed framework of educational interaction resources, EAP practitioners also need to provide their students with a holistic perspective of participation in educational interaction. They can inform EAP learners of how the four types of interaction resources (linguistic, social relation, domain knowledge, and learning resources) can often influence one another. EAP learners can also be made aware of possibilities of strategic deployment of resources available in a given situation at the same time while well-balanced developments of every resource should be encouraged. For example, EAP learners may be informed of how forming good social relationship with other peers can compensate for their shortage of linguistic resources. They learn this strategic compensation with reference to some empirical evidence as shown in this research. In one case dealt with in this study, an international student felt comfortable in their established friendship talking about what she needed, without being too much concerned about her perceived grammatical mistakes. Another strategic use of available resources is that, when EAP learners notice their domain knowledge resources are not adequate enough to have their own floors, they can instead use active knowledge reception functions, which are a sub-component of learning resources, and support and contribute to their peers' floor makings. These instances of strategy in active interaction were actually documented in the data the current research has gathered.

### **2.3. Development of collaborative patterns in peer interaction**

The collaborative patterns identified through discourse analysis will inform EAP learners of how they can behave in educational peer interaction for collaborative learning. Drawing upon the framework of the three different types (floor support, differing perspectives, labor division), they can develop systematically how they can choose to contribute to the ongoing peer interaction while actively negotiating their own and peers' learning. For example, they can raise their awareness of the three collaborative patterns through watching videos of NSE local students' authentic peer interaction, analyses of the transcription of the videos, or discussions on cultural differences in behaviours in interaction between the NSE local students and themselves. Also, through these activities, they can learn how they signal their intended collaboration patterns linguistically.

### **2.4. Development of learner autonomy in the target situation.**

As the last segment of pedagogical implications, the current study can offer, it is argued that ethnography, the methodology taken by the current researcher for this study, can be transferred as EAP learners' strategy of learning how to use English in the target language use situation (Molle & Prior, 2008). As no curriculum in reality is likely to be able to cover every necessary piece of information that would help EAP learners in the target academic environments, EAP learners are expected to acquire sufficient knowledge and skills in the EAP curriculum to become autonomous learners outside of the curriculum or after finishing the curriculum. Ethnography can give them principles that will serve this purpose. An exemplary procedure is as follows: First, EAP learners can be encouraged to pay attention to any difference between their previous educational practices and the ones in their target situation and try to understand the perceived phenomena from the insiders' perspectives. To pursue these objectives, they need to be made aware of how they can commit themselves to their new educational practices at the same time when attending to any noticeable phenomenon from their own perspective. They can then take advantage of any interaction opportunity to gain understandings of the observed differences. As they are gradually establishing empathy with local students in the



target situation, for example, they can ‘interview’ them for the insiders’ perspectives about their observations. Interaction with other EAP learner ethnographers to share their observations may help validate their findings and even enhance their critical observation abilities essential while doing ethnographic field work. All these efforts on the part of EAP learners will lead up to more holistic understandings of the educational practices they are participating in, which cannot be easily given by the EAP curriculum alone. EAP practitioners can thus raise their students’ awareness of what they can do after they have finished the EAP curricula up to the level of autonomous ethnographic learning activities.

### **3. Limitations of this research**

While there are many contributions to the EAP research field which the current research can offer, its findings and discussions are not without potential limitations. First of all, the nature of data gathered in this qualitative study needs the following four considerations:

(1) The transferability of the findings are limited to the extent that the study is contextualized in a particular location and time as a qualitative investigation. In other words, exploring and describing the educational practices of three disciplines in Victoria University of Wellington in a given time frame cannot be considered to warrant the generalizability of knowledge gained from the study beyond its particular research setting. Similarity in settings, however, is expected to allow readers to transfer some of the results of the study to a different context on the basis of thick description of the particular contexts it offers.

(2) There is a possibility that the participants’ personal nature might have been biased to influence the data and results significantly, and their representativeness of locality (‘local’ VS ‘international’) as well as language status (‘native-speaker-of-English’ VS ‘non-native-speaker-of-English’) is controversial as was admitted in the Methodology chapter.

(3) The data size itself deserves attention to evaluate the credibility of the current research. While the current research aims to describe particular contexts in a thick way, multiple disciplines chosen as research venues, instead of concentrating on one, do warrant caveats in terms of how thickly each of the different contexts is depicted. More studies with similar designs will add to

the knowledge gained by this study and collectively contribute to providing more articulated insights into the difference and commonality in postgraduate educational practices across disciplines.

(4) This investigation was largely oriented towards “target situation analysis” (Flowerdew, 2013) in the framework of Needs Analysis, which aims to investigate “what learners are required to do with the foreign or second language in the target situation” (p.326). While this attention to specific requirements in the target situation is essential for designing any EAP program, it should be emphasized that the target situation analysis only constitutes a part of Needs Analysis and needs to be complemented by other components, that is; “present situation analysis” (Jordan, 1997), which focuses on the current EAP learners’ ability, resources, and views of learning/teaching, or “environment analysis” (Basturkmen, 2010), which includes investigating EAP practitioners’ belief systems. These lines of research will add to knowledge regarding what perspectives EAP learners and practitioners might have as to aspects of postgraduate educational practices, such as communicative events, justifications for the events, and expected communicative competence in the events.

Secondly, it should be emphasized that the knowledge gained in this study is limited in the sense that the analyses of the obtained qualitative data sets are subjective and impressionistic. The following three points deserve specific attentions:

(1) Using a Grounded Theory approach for the data analysis, the subjectivity of the researchers naturally impacts strongly on the findings from the data. While this characteristic nature of qualitative research is recognized to be its strength “as an essential element of understanding human activity” (Stake, 2010, p.29) in a subjective research paradigm, some readers might have a legitimate concern based on a different theoretical framework around the credibility of the offered findings. Aside from rich descriptions of contextual information and data triangulation, the current study has provided abundant raw data in the form of transcription and thus shown processes of how the researcher reached given understandings. The data is still open to multiple different interpretations from different positionings adopted by interpreters.

(2) The technique of discourse analysis, termed as Floor Analysis, is also not an a priori system but a product of qualitative and interpretive explorations grounded on the obtained data. While it can be captured as a development of the existent concept of “floor” (e.g Edelsky, 1981; Jones &

Thornborrow, 2004) as global meaning makings spread across turns, innovation around across- and within-floor relationships should be further examined in more opportunities to use this analytical technique. The validity of the proposed technique could be enhanced with applications to different sets of data in the future studies.

(3) The researcher's own knowledge resources have greatly influenced the data collection especially in the classroom observations. The researcher has extensive domain knowledge around the Applied Linguistics and TESOL research fields as well as actual experiences of the educational practices in these disciplines, which accommodated his data gathering in the classrooms with his deep understandings of what was going on in the education and how differently the students could approach the academic topic in interaction. On the other hand, in Engineering and Business School, his lack of expertise made it difficult for him as an outsider to understand the stakeholders' nuanced implementations of communicative functions for learning. Especially at postgraduate level, as the contents and materials dealt with were found to be very much specialized, ethnographic accounts with deep understandings were particularly difficult for an outsider. Although these shortcomings were addressed in the forms of interpretation checks in interviews as well as triangulations, more detailed understandings of Engineering and Business School are expected to be made by researchers who have larger insider knowledge and perspectives.

#### **4. Future development of EAP research into postgraduate educational practices**

Besides the above-mentioned suggestions that could address the limitations of this research, knowledge gained in this study can become the basis of future development of EAP research into postgraduate educational practices. Here are several suggestions among others that warrant further investigation.

(1) The framework of learning modes and peer interaction types has the potential to be instrumental for larger-scale survey studies. It can be used to investigate the practices of communicative events in higher education as well as active and collaborative learning in the

target language use situation. In this sense, it can be a tool for Needs Analysis for EAP curriculum designers.

(2) Floor analyses on different tasks in different peer interaction settings have the potential to find additional types of learning resources or communicative competence in collaborative learning contexts. Also, comparative approach with floor analyses, for example, between peer interaction and hierarchical interaction, can also inform EAP practitioners and learners more of the nature of learning resources required in active and collaborative learning environments.

(3) With the ethnography of communication approach, research venues could be expanded into different educational contexts, in terms of disciplines, sub-disciplines, universities, and countries. EAP researchers will thus have more detailed insights into how different variables can play out in postgraduate educational practices and students' participation in the practices.

## 5. Concluding remarks

This research originated in my personal experience as an international student from Japan who enrolled in a Master's program of Victoria University of Wellington. On the first day of the postgraduate program, I remember, I walked to accommodation after the class, wondering about whether I would ever be able to successfully finish the program. The interaction I encountered there on that day was something different from what I had experienced before. My *listening resources* were almost useless to catch up with the ongoing conversations in class, and I felt hopeless especially when my peers unexpectedly started to talk with the lecturer or developed the talk into active peer interaction (*Voluntary Type peer interaction*). Their natural behavior in the postgraduate classroom (*learning resources*) were clearly far more active than I had expected. .

I noticed then that my unfamiliarity with the academic topics (*domain knowledge resources*) was worsening the problem and the lack of any friendship with other peers (*social relation resources*) at this initial stage of my learning in new environments added affective stresses to the cognitive issue. I felt I needed to do something about it with all these aspects of the classroom learning. For two years after that day, I tried to develop these resources and found

myself with some level of improvement at the end of the program. I was satisfied with my own academic achievement in this postgraduate program, but, in terms of interaction, I was still not sure whether I could confidently and actively participate in academic and even private discussions with my peers. Reflecting upon this time, I think I could not support other students actively using nuanced communicative functions, such as utterance completions, paraphrasing, and substitutive claims (*active knowledge reception resources*), nor could I move to create my own floor to deal with a different aspect of the same topic that might not be directly connected with the previous speaker's floor (*collaborative learning with labour division*). I was simply unaware of these sorts of communicative competence in my second language. I was not quite sure either of the lecturers' motivations behind the pedagogical use of peer interaction, such as educational benefits of talking (*the lecturer's pedagogical belief*).

My two-year socialization process into the new educational practice ended with this mixed feeling of accomplishment. Obviously in my case, issues around educational interaction would take me much longer time and effort to sort out than I had expected. This experience with my Master's course studies motivated me to launch on, or continue, to be precise, because it was already launched, my investigation into this educational environment in a New Zealand university. I now look back and can say that my MA and PhD journey has been quite an ethnographic journey.

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# APPENDICES

## Appendix 1: Ethics related documents



### Information Sheet for Lecturer: Observation and Interview

Research title: Post-graduate classroom activities

Researcher: Shota Mukai

Organization: The School of Linguistics and Applied Language Studies

Dear,

My name is Shota Mukai and I am a PhD student in the School of Linguistics and Applied Language Studies. I am investigating the kinds of participation patterns and activities used in classes at post-graduate level. I have the HEC approval for this study. Please read information in this consent sheet before deciding whether you will participate in my research.

My research is important because the information from this research is very useful for researchers and teachers who are involved in academic English teaching/learning. For example, the information will be useful for English teachers when they decide what learning activities they will use in their classrooms.

This research has two phases. In the first phase of this research, I would like to observe the activities and interaction that take place in your course, and audio-record your and your students' voices using lapel microphones. I will sit unobtrusively at the back of the room and will not participate in the class in any way. In the second phase, I would like to interview you for around 45 minutes about your experiences as a lecturer concerning classroom activities in your postgraduate classes.

The information will be strictly restricted to me and my supervisors for this research purpose, with future possibilities that it will be used for conference presentations or journal publications. This is not strictly an anonymous research, but your personal details will be made confidential in any way. The paper data will be kept in a locked storage and electronic data with

a password for five years and destroyed after that. You can withdraw before the 1<sup>st</sup> of February 2015.

If you need any feedback on the information you will give me at an interview, I am available whenever you feel you need it. If you are interested in reading my future publications related to this research, I would be more than happy to let you know. My contact details are below;

Researcher: Shota Mukai  Email: <a href="mailto:Shota.Mukai@vuw.ac.nz">Shota.Mukai@vuw.ac.nz</a> Office Phone: 04-463-5233 ext.8999 Office: Room 204 22KP Kelburn Campus Mobile Phone: [REDACTED]	Supervisor: Averil Coxhead  Email: <a href="mailto:averil.coxhead@vuw.ac.nz">averil.coxhead@vuw.ac.nz</a> Office Phone: 04-463-5625 Office: Room 403 Von Zedlitz Building, Kelburn Pde, Kelburn Campus
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If you have any questions or comments on this research, you can also feel free to contact me in the channels shown above.

Thank you so much for reading through this information sheet.

Shota Mukai





## **Information Sheet for Students: Observation and recording**

Research title: Post-graduate Classroom activities

Researcher: Shota Mukai

Organization: The School of Linguistics and Applied Language Studies

Dear,

My name is Shota Mukai and I am a PhD student in the School of Linguistics and Applied Language Studies. I am investigating classroom activities at post-graduate level. I have the HEC (Human Ethics Committee) approval for this study. It is important that you read information in this consent sheet before deciding whether you will participate in my research.

My research is important because the information from this research is useful for researchers and teachers who are involved in academic English teaching/learning. For example, the information will be useful for English teachers when they decide what learning activities they will use in their classrooms.

If you participate in this research, I will visit your class to observe classroom activities and your interaction with other students and the lecturer. Also I will record your interaction with the instructor and other students.

The information will be strictly restricted to me and my supervisors for this research purpose, with future possibilities that it will be used for conference presentations or journal publications. Your personal details will be kept strictly confidential and secure. The paper data will be kept in a locked storage and electronic data with a password for five years and destroyed after that. You can withdraw before the 1<sup>st</sup> of February 2015.

If you need any feedback on the information you will give me at an interview, I am available whenever you feel you need it. If you are interested in reading my future publications related to this research, I would be more than happy to let you know. My contact details are below;

Researcher: Shota Mukai	Supervisor: Averil Coxhead
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Email: <a href="mailto:Shota.Mukai@vuw.ac.nz">Shota.Mukai@vuw.ac.nz</a> Office Phone: 04-463-5233 ext.8999 Office: Room 204 22KP Kelburn Campus Mobile Phone: <span style="background-color: black; color: black;">XXXXXXXXXX</span>	Email: <a href="mailto:averil.coxhead@vuw.ac.nz">averil.coxhead@vuw.ac.nz</a> Office Phone: 04-463-5625 Office: Room 403 Von Zedlitz Building, Kelburn Pde, Kelburn Campus
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If you have any questions or comments on this research, you can also feel free to contact me in the channels shown above.

Thank you so much for reading through this information sheet.

Shota Mukai



## **Information Sheet for Student: Interview**

Research title: Post-graduate Classroom Activities

Researcher: Shota Mukai

Organization: The School of Linguistics and Applied Language Studies

Dear,

My name is Shota Mukai and I am a PhD student in the School of Linguistics and Applied Language Studies. I am investigating classroom activities at post-graduate level. I have the HEC approval for this study. It is important that you read information in this consent sheet before deciding whether you will participate in my research.

My research is important because the information from this research is very useful for researchers and teachers who are involved in academic English teaching/learning. For example, the information will be useful for English teachers when they decide what learning activities they will use in their classrooms.

If you participate in this research, I will interview you for 30 ~ 45 minutes about your experience of post-graduate classroom activities.

The information will be strictly restricted to me and my supervisors for this research purpose, with future possibilities that it will be used for conference presentations or journal publications. This is not strictly an anonymous research, but your personal details will be made confidential in any way. The paper data will be kept in a locked storage and electronic data with a password for five years and destroyed after that. You can withdraw before the 1<sup>st</sup> of February 2015.

If you need any feedback on the information you will give me at an interview, I am available whenever you feel you need it. If you are interested in reading my future publications related to this research, I would be more than happy to let you know. My contact details are below;

Researcher: Shota Mukai	Supervisor: Averil Coxhead
-------------------------	----------------------------

Email: <a href="mailto:Shota.Mukai@vuw.ac.nz">Shota.Mukai@vuw.ac.nz</a> Office Phone: 04-463-5233 ext.8999 Office: Room 204 22KP Kelburn Campus Mobile Phone: <span style="background-color: black; color: black;">XXXXXXXXXX</span>	Email: <a href="mailto:averil.coxhead@vuw.ac.nz">averil.coxhead@vuw.ac.nz</a> Office Phone: 04-463-5625 Office: Room 403 Von Zedlitz Building, Kelburn Pde, Kelburn Campus
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If you have any questions or comments on this research, you can also feel free to contact me in the channels shown above.

Thank you so much for reading through this information sheet.

Shota Mukai



**Consent Sheet: Agreement to participate in the “Post-graduate Classroom Activities” study.**

Please sign your name if you agree to participate in this research after you have read the accompanying statements. In case of any question, please feel free to contact me using the channels give in the information sheet.

I understand the nature and objectives of this research from the information provided in the information sheet I read.

I understand that I can withdraw from this research before the 1<sup>st</sup> of February 2015. If I withdraw, the information related to me will be removed immediately.

I understand that the information I have provided will only be stored and used for this research and related publications and presentations, and that any further use will require my consent.

I understand that when this research is completed the information obtained will be destroyed after five years of storage.

Name: \_\_\_\_\_

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

## Appendix 2: Observation field note sample

brenda LALS544 discourse analysis

[4:13:34 PM] conversation analysis is the topic

[4:16:38 PM] brenda starting a class with the topic of assignment

[4:17:02 PM] task peer

[4:17:07 PM] partner up

[4:17:16 PM] about assignment

[4:17:25 PM] no

[4:17:32 PM] it's around table kind of setting

[4:17:39 PM] japan guy

[4:17:54 PM] brenda ask for clarification

[4:18:01 PM] brenda made acknowledgement

[4:18:48 PM] brenda ask everyone to manage assignment

[4:19:19 PM] grey guy

[4:19:42 PM] brenda comment

[4:19:46 PM] briefly

[4:19:52 PM] japan jump in

[4:19:59 PM] facing to brenda

[4:20:07 PM] not to grey

[4:20:32 PM] trying to get how to do effectively transcription

[4:20:37 PM] sem jumps in

[4:20:45 PM] sem facing to japan

[4:20:55 PM] PEER hre

[4:21:11 PM] sem gave some information to peer about software

[4:21:20 PM] sem becomes a resource

[4:21:24 PM] brenda

[4:21:26 PM] grey

[4:21:43 PM] Brenda

## **Appendix 3: Interview guide**

### **Interview Guide for Lecturers**

#### **1. Activity identification**

What sorts of classroom activities do you choose for this particular course?

#### **2. Academic level**

Do you set up different activities between 400/500 (postgraduate) and 300 and below (undergraduate)?

#### **3. Course nature**

Do you think you set up different activities for your different courses?

#### **4. Active learning**

How do you expect students to participate in classroom activities?

#### **5. Collaborative learning activities**

Do you give collaborative learning activities in or outside the classroom? If you do, why and what do you expect from that? Any issues?

#### **6. Assessment**

Do you assess students' participation in classroom activities?

#### **7. Personal belief behind practices**

What influenced your current style of teaching practice? Disciplinary expectation/constraint, personal experience as students and teachers, career development resources such as books, or personal experiences in the real world?

#### **8. NS-NNS interaction**

Do you find any issues with your interaction with NNS students or peer interaction between NS and NNS students?

## **Interview Guide for Students**

### Activity type and study level

1. Do you find any difference in classroom activities between your current postgraduate studies and previous undergraduate studies?

### Intercultural difference

2. Do you identify any 'Kiwi' culture in terms of classroom learning activities and classroom interaction?

### Language

3. Do you find any difference between your own L1 and L2 use when you participate in classroom interaction?

4. Does your L2 cause any specific difficulty in the academic interaction?

### interaction type

5. Do you voluntarily give questions or comments to lecturers in lecture?

6. Do you think you behave differently or feel different when you talk with lecturers and peer classmates?

7. How do you participate in the talk held between the lecturer and another student? Do you think you take the floor voluntarily during a talk held between the lecturer and another student? If you do, when you do you think you need to do so?

### Peer talk/work

8. What do you think is the point of doing peer talk/work in classroom? Do you think it benefits you in any way?

9. Do you find any issue with peer interaction? If you do, how do you cope with that?

### Native Speakers VS Non-Native Speakers

10. Do you find any difference between NS and NNS in terms of participation and behaviour in classroom interaction?

11. Do you find any benefit or issue with interaction with NS/NNS?



#### Appendix 4: The floor analysis of four postgraduate students'

Learning Mode Floor	Learning Material Floor	Active Knowledge Use (AKU) Floor <Topic>	Active Knowledge Use Sub-floor	Active Knowledge Reception Function
Group discussion floor  (In-Class Collaborative Task floor)	Iwashita et al. 2008	Simon's AKU  <Iwashita et al.'s validation of IELTS speaking test>	Rachel's academic knowledge sharing	
			Simon's academic knowledge sharing	Rachel's utterance completion
				Sonia's information elicitation(floor)
				Sonia's paraphrase
				Sonia's utterance completion
			Simon's affective evaluation	
		Sonia's AKU  <what is problematic about speaking tests for a teacher examiner>	Sonia's claim	Simon's information elicitation(floor)
				Rachel's information elicitation(floor)
			Simon's counter claim against Sonia	Sonia's AKR for disagreement (floor)
				Sonia's paraphrase

	Brown, 2003	Sonia's AKU  <the need to address within-examiner variation>	Sonia's academic knowledge sharing	
			Sonia's claim	Rachel's information addition
				Rachel's utterance completion
				Rachel's repetition
			Simon's personal knowledge sharing	Rachel's utterance completion (floor)
			Sonia's personal knowledge sharing	Rachel's paraphrase
				Simon's utterance completion
		Rachel's AKU  <the unethical performance of an unsupportive IELTS examiner>	Rachel's academic knowledge sharing	Simon's paraphrase (floor)
				Sonia's utterance completion
				Simon's utterance completion
				Simon's information edition
			Sonia's claim	Rachel and Simon's agreement / disagreement
			Rachel's claim	

			Sonia's alternative claim	Rachel' paraphrase
			Simon's alternative claim	
			Rachel's academic knowledge sharing	Jasmine's information elicitation (floor)
				Simon's information elicitation(floor)
				Simon's substitutive affective evaluation
				Simon's substitutive affective evaluation
			Rachel's claim	Simon's elicitation for alternative claim (floor)
		Sonia's AKU	Sonia's academic knowledge sharing	
			Sonia's affective evaluation	
			Sonia's claim	

		<the difficulty of speech assessment for an examiner>		
		Simon's AKU  <the need to address across-examiner variation>	Simon's claim	
		Rachel's AKU  <across-examiner variation>	Rachel's claim	
			Rachel's academic knowledge sharing	
			Rachel's personal knowledge sharing	Simon's information addition
				Simon's utterance completion
				Simon's substitutive affective evaluation
				Simon's substitutive affective evaluation
				Simon's substitutive

				affective evaluation
				Simon 's substitutive claim (floor)
				Simon's substitutive affective evaluation
		Jasmine's AKU	Jasmine's personal knowledge sharing	Rachel's paraphrase
		<within-candidate variation due to topic variation>		Rachel's utterance completion
				Rachel's summary
				Simon's information elicitation (floor)
				Rachel's information addition (floor)
				Simon's information elicitation (floor)
				Simon's information elicitation (floor)
				Rachel's information elicitation (floor)
				Rachel's summary

				Simon's information addition
				Rachel's information addition
				Simon's information elicitation(floor)
				Rachel's information elicitation(floor)
				Sonia's information elicitation(floor)
Off topic				
<cost for language-related certificates and job availability>				
Zhang and Elder, 2010	Simon's AKU  <ifferences between native and non-native examiners of speaking test>	Rachel's academic knowledge sharing		
		Simon's affective evaluation		
		Simon's academic knowledge sharing	Rachel's utterance completion	
			Jasmine's information edition	
		Simon's affective evaluation		

## Appendix 5: Example of the floor of conflicting perspectives

#	SIMON	RACHEL	SONIA
1	could you not, this, or you could just record them, couldn't you?	mhm	
	wouldn't it be that , that is		
			you can't be, you know, you gotta be quite pragmatic,
			if you got forty people to test, you can't, you know,
			and results have to be in by,
		mhm	you know, uhm, to the head of the department by the end of the week
		yeah	
			you can't spend half an hour re- playing every, you know,
	mhm		it's certainly a help if you've got one, you're a bit, but
2	'cause that if	yeah	
		have you done any, uhm, like formal testing? Like, IELTS or anything like that?	'cause it
		mhm yeah	I hav-, I haven't, I've done uhm, testing at university level

			according to the university's, uhm, requirements
			but I haven't done any internationally scaled testing
		scaled one yeah	
	it's funny because	Interesting, like, what sort of training you would get if you, uhm,	
	yeah, yeah, yeah,		mhm
*      3	<b>that's interesting</b>		
	<b>thought 'cause</b>		because this
	<b>I was just gonna say,</b>		
			yeah
	<b>when you're in New Zealand context, you have to video and you have to use that</b>		
	<b>as your primary report any minute you can't,</b>		mhm
	<b>you can't do it any other way</b>		
			mhm
	<b>you can't sit there and go 'oh yep, they got that'</b>		
	<b>because</b>		mhm
	<b>if someone needs to see good mark, they</b>	yeah, yeah	



got, they also need to see the video		
just to say, to justify in case, for example, they use the		
they use these things to,		'cause it hugely uhm
to fit the purpose or these things		
so is		resource
		uhm
		you know heavy
hell yeah yeah		
but in, I don't know, I think it's difference between		
what teachers are expected to do		
in the context of, you know, like,		mhm
no, if you got an assessment to do and put this many people		
to assess		mhm
you do it until it's done		
you don't	mhm	mhm
you don't go 'oh well I got forty'		

<b>you do it</b>		mhm
		you just have to, mhm
<b>you smash it out</b>		
<b>you do it on the weekend</b>		mhm
<b>you do it whenever</b>		
<b>you do it, you know</b>		Mhm
<b>different expectation, man</b>		

## Appendix 6: Example of the floor of labour division

SIMON	RACHEL	SONIA
	yeah	conclusion is really, uhm,
		that, so, so there's two things that came out
		one is, uhm, you know how adequate is the training of, uhm, of the interviewers
IELTS people, yeah	yeah	
		and, uhm, and the other one is, uhm, you know, how adequate are
		the definitions of the criteria if you like
		so this is really interesting, I think,
		'communicative competence or effectiveness
		is an abstraction
		that is rarely defined with any precision in terms of actual test performance'
		so that's, that's the real difficulties in, in assessing those subtleties,
mm mm		those things we're just talking about,
mm mm		uhm, because they play such an enormous part in

		communication and yet this system to assess them is,
mm, certainly you would, you want to rely on some sort of		were different, this one
some sort of, you know, test wide version of, test wide kind of		
method of communication, test wide training that, that, and, you know, uhm,		
some sort of regist-, maybe, not registration but, you know, having to meet that,		
those standards every time you do interviews		Mhm
or been, you know, peer assist or moderated or anything like that		
just say that this, interviewers are always gonna act or we're gonna try		
make all interviewers act in a certain way,		,

rather than having them all act in different ways in giving different scores	I think	Mhm
then it brings the, the reputability of the test, I think	Yeah	
and disrepute you know	I think probably Ian thinks that he is not allowed to give any kind of positive feedback,	
Mhm	you know, otherwise it might be	
	you know, misconstrued and Pam's sort of taking it as a different way	mhm
that's what I mean	like she is going to kind of lead them through and see what she can get	
	and then, uhm, that kind of thing	