



## The role of tag questions in classroom discourse in promoting student engagement

Jean Parkinson & Lauren Whitty

To cite this article: Jean Parkinson & Lauren Whitty (2022) The role of tag questions in classroom discourse in promoting student engagement, Classroom Discourse, 13:1, 83-105, DOI: [10.1080/19463014.2021.1954959](https://doi.org/10.1080/19463014.2021.1954959)

To link to this article: <https://doi.org/10.1080/19463014.2021.1954959>



Published online: 13 Sep 2021.



Submit your article to this journal [↗](#)



Article views: 311



View related articles [↗](#)



View Crossmark data [↗](#)



# The role of tag questions in classroom discourse in promoting student engagement

Jean Parkinson and Lauren Whitty

School of Linguistics and Applied Language Studies, Victoria University of Wellington, Wellington, New Zealand

## ABSTRACT

In classroom teaching, where teachers front a large class of students, opportunities for students to talk are limited, with much classroom talk by students involving answering teacher questions. This raises the question of how teachers promote student engagement in their lessons. Using a 394,671-word corpus of recorded teaching in vocational education, this study investigates a discourse feature of classroom discourse, the use of tag questions. Our study compares the use of tag questions in two teaching contexts: teacher-fronted whole-class teaching in the classroom and teaching through interacting with individuals or pairs during skills-teaching in the workshop or construction site. Every tag question (755) in this corpus was analysed for polarity, position in turn, intonation and speech function. The study shows the importance of tag questions in both contexts in involving students in the instructors' on-going explanations both in silent thought and through brief verbal responses or actions. Instructors also use tag questions to focus students' attention, to ensure that students are following their explanations, to involve students in problem-solving, to seek information about students' practical work, to remind them of known information, and to construct them as co-experts who already have some knowledge and judgement related to their vocational field.

## KEYWORDS

Classroom discourse; tag questions; speech functions; student engagement

## 1. Introduction

Talk in the classroom is organised differently than it is in conversation. Early classroom discourse researchers (e.g. Sinclair and Coulthard 1975; Mehan 1979) described the three-part structure in classroom discourse as a teacher question, followed by a student response and a teacher evaluation of that response. In classroom discourse, the teacher has greater rights than the students to speak, and the teacher plays a key role in assigning turns. Although research in the last few decades has shown that classroom discourse is less rigid than this three-part Initiation-Response-Evaluation structure suggests (e.g. Waring 2011; Margutti and Drew 2014; Lee 2007; Garton 2012; Petitjean 2014; Gardner 2015), nevertheless, it is clear that classroom discourse does place limitations on students' ability to take a turn in classroom talk. In addition, student turns are much shorter than instructor turns, often limited to phrasal and clausal responses (Csomay 2002, 2012).

**CONTACT** Jean Parkinson ✉ [jean.parkinson@vuw.ac.nz](mailto:jean.parkinson@vuw.ac.nz) 📧 School of Linguistics and Applied Language Studies, Victoria University of Wellington, Kelburn Parade, Wellington 6012, New Zealand

© 2021 Informa UK Limited, trading as Taylor & Francis Group

Given these limitations on student involvement in classroom talk, what features of teacher talk might tend to engage students' attention? Corpus-based studies have shown that a range of linguistic features associated with an 'involved' focus, which is related to interactive and affective purpose (Biber and Finegan 1989), are common in spoken instructional language, and can contribute to student engagement in classroom talk. For example, Biber (2006, 186) reports a high frequency of features associated with an involved focus such as personal pronouns, WH-questions, and personal stance features like hedges in university teaching. Likewise, Csomay (2006) found similarities in the features of university classroom discourse and face-to-face conversation: both have high frequencies of private verbs and personal pronouns.

Of interest to the present study is Barbieri's (2015) investigation of discourse features associated with an involved style, reflecting emotional and experiential participation. Significant to our study, she found that, particularly in smaller classes, tag questions (e.g. *isn't it*) were frequent. Barbieri (2015) regards these features as ways in which classroom instructors signal their own involvement in the classroom discourse. This article focuses on tag questions and investigates their potential for involving students in classroom discourse, even if their opportunities for talk remain limited.

A study that focused on the role of tag questions in the classroom is Michalovich and Netz (2018), who examined the Hebrew tag *naxon*, which is similar to the English invariant tag 'right'. They report that *naxon* used with rising intonation, indicating appeal, is used much more frequently in the classroom than in conversation. In the classroom, *naxon* with rising intonation was used by teachers to seek confirmation of topic identification, as well as to solicit students' confirmation of topic understanding. Othman (2010) also found the invariant tags 'okay' and 'right' in lectures to function as confirmation checks. Students were found to respond to these tags with head nods or gaze rather than verbal responses. A similar confirmatory purpose is reported by Chen and He (2001) for the Chinese invariant tag *dui bu dui* (correct-not correct). They found that this tag was used in between one teacher question-student response-teacher evaluation sequence and the next to seek confirmation of understanding. Significantly, they report (2001, 1441) that teachers used this tag to 'maintain the addressee's attention in given activities'. Most studies of classroom use of tag questions have, like the ones discussed here, focused on invariant tags such as 'right' and 'okay'. In contrast, the focus of our study is 'canonical' tags such as 'isn't it' and 'don't they', which have not been given much attention in classroom discourse studies.

Despite the dearth of studies focusing on the use of canonical tags in the classroom, several classroom discourse studies did comment on their use in the classroom. The context of such studies ranges from primary and high school to undergraduate teaching. For example, Thwaite's study (2014, 12) in an early primary science class reported that teachers use tag questions as requests for children to reconsider their answers ('You're the brick makers, **are you?** Is that what it's called?'). They also used them inclusively, treating the children as being as knowledgeable as the teacher about the topic (e.g. 'Oh, memory full. That didn't take many, **did it?** That's very strange.'). Studying primary literacy classrooms, Mohr (1996) reports that tag questions were used to 'help students connect information with prior knowledge' ('When someone is trying to convince you, they'll be real nice and soft, **won't they?**'). She notes that although teachers often expected no response, the tag questions functioned to focus student attention on the topic, or sought

student agreement; students often responded with ‘quiet, consensual remarks and head nods’ (Mohr 1996, 147). Studying undergraduate theatre classes, Syler (2016) reports that tag questions were used to foster student interest by focusing attention on particular performance moments.

Given this reported use of tag questions in instructional discourse, our study investigates the frequency and function of canonical tag questions in teaching in vocational education, a hitherto little-studied educational context. Previous studies of the function of canonical tag questions have focused on conversation, and have investigated tag questions in different varieties of English including British English (e.g. Kimps, Davidse and Cornille 2014), American English (Tottie and Hoffman 2006), and New Zealand English (Holmes 1995). However, the role of canonical tag questions in teaching has been scarcely investigated, a gap that this study seeks to fill. We hypothesise that tag questions in instructor talk not only demonstrate instructor involvement, but may also foster participation and engagement by students in classroom discourse. Our approach is to investigate the frequency and function of tag questions (TQs) in a post-secondary vocational context.

The research questions this study explores are as follows:

- (1) How frequent are TQs in teacher-fronted whole-class teaching and in more individual skills-based teaching in the workshop or construction site compared with conversation?
- (2) What are the speech functions of TQs in these two contexts, and how do these compare with conversation?
- (3) Do TQs have a pedagogical role in these two contexts, and if so, what are they?

Below we outline the framework employed in analysing tag questions, before reporting the methodology we used in collecting and analysing our data. We then provide a quantitative analysis, addressing Research Questions 1 and 2, followed by a qualitative analysis addressing both Research Questions 2 and 3.

## 2. Theoretical frameworks used in this study

We employ two theoretical frameworks for the analysis of the data in this study. The first is the framework used for our analysis of tag questions. The second focuses on the concept of participation frameworks which we use to describe the interaction in the contexts within which teaching took place at the vocational institution where we collected our data.

### 2.1. Framework for analysis of tag questions

The features often associated with TQs include polarity, position in turn, intonation, as well as speech functions (Axelsson 2011; Kimps, Davidse, and Cornillie 2014). Below we discuss the treatment in the literature of these features.

#### 2.1.1. Polarity

TQs are found in four polarity patterns: positive-negative, negative-positive, positive-positive, negative-negative, with positive-negative polarity being the most frequent

(Axelsson 2011; Kimps, Davidse, and Cornillie 2014). In (1), the anchor clause is positive in polarity, and the tag is negative. Conversely, the anchor may be negative and the tag positive (2). In (3), anchor and tag have negative polarity, while in (4) both have positive polarity:

- (1) Now your hazard notification board is identifying the hazards, **isn't it**↓ [CLASSROOM]
- (2) You haven't really seen any difference, **have ya**↓ ... very small [CLASSROOM]
- (3) nothing's stopping it from rocking around there, **isn't it**↓ [WORKSHOP]
- (4) So we have about 1 volt, **do we**↑ [WORKSHOP]

### 2.1.2. Position in turn

Tag questions occur either at the end of a speaker's turn in turn-final position as in (1) – (4), or in the middle of the speaker's turn in turn-embedded position as in (5). Previous studies have found that TQs are usually turn-final in position (Axelsson 2011; Kimps, Davidse, and Cornillie 2014).

- (5) But I know what you're saying, because you'll eliminate the joint **won't you**↓ cos it's one full sheet. [WORKSHOP]

### 2.1.3. Intonation

Intonation is salient in TQs, contributing to function and meaning. The tag in TQs can have a falling tone (indicated with a downward arrow), as in (1), (2), (3) and (5); less frequently tags have a rising tone (upward arrow), exemplified in (4). A rising tone suggests that the speaker is uncertain and expects an answer from the addressee, while a falling tone suggests that the speaker is sure of the statement in the anchor and merely expects acknowledgement, or no answer (Quirk, Greenbaum and Leech 1985).

### 2.1.4. Speech function

Approaching TQs from a pragmatic perspective, studies such as Kimps, Davidse, and Cornillie (2014), Holmes (1995), and Tottie and Hoffmann (2006, 2009) report that TQs fulfill various speech functions besides questioning. TQs, particularly those with a falling tone, can function as statements, and can also blend the function of statement and question (Kimps, Davidse, and Cornillie 2014). In addition, as Holmes (1995) and others have noted, TQs can function in suggestions or directives.

Axelsson (2011), Barron, Pandarova, and Muderack (2015), and Kimps, Davidse, and Cornillie (2014) view the speech functions of TQs as divided into two types. Firstly, TQs functioning as either questions, statements or statement-question blends involve exchanging information. Secondly, TQs functioning as suggestions and commands involve exchanging goods and services; and are called 'desired action' TQs by Barron, Pandarova, and Muderack (2015). With regard to exchanging information, based on Labov and Fanshell (1977), Axelsson (2011, 67) summarises the knowledge of speaker (A) and hearer (B) below:

- A-events: Known to A, but not to B.
- B-events: Known to B, but not to A.
- AB-events: Known to both A and B.

In an A-event, the speaker already has the information. In a B-event, the hearer has the information and the speaker is seeking information. In an AB-event, both A and B have access to the relevant information.

**2.1.4.1. Statements.** TQs functioning as statements ‘represent an A-event, with the speaker being the primary knower’ (Barron, Pandarova, and Muderack 2015, 502). Statements are frequently turn-embedded, because the speaker ‘does not expect a response’ (Kimps, Davidse, and Cornillie 2014, 77). Two statement TQs are shown in (6):

- (6) draining water from the solar fuel heater, uncontrolled heat source, **isn’t it**↓ we can’t just switch it on and off **can we**↓ so if the fire is going ... and what will happen if the water drains out of it [...]?  
(Statement) [CLASSROOM]

**2.1.4.2. Questions.** Questions, as in (7), for example, are mostly B-events with the speaker knowing less than the addressee and are usually turn-final so that the addressee has an opportunity to respond. A question can also be an AB-event where both speaker and addressee know about the event, but the speaker wants confirmation from the addressee; in other words, the speaker wants the addressee to admit or acknowledge the anchor.

- (7) Instructor: Hang on, hang on, hang on ... come back here, you know how to check a relay, **don’t you**↓  
Student: I do  
(Question) [WORKSHOP]

**2.1.4.3. Statement-question blends.** In statement-question blends, as in (8), for example, both speaker and addressee know about the event but the speaker still expects a response. Barron, Pandarova, and Muderack (2015, 505) explain, ‘these TQs are employed when the speaker is certain of the truth of the proposition but nevertheless requires a response from the addressee’.

- (8) Instructor: How do you get the coolant into the engine?  
Student: Water jackets  
Instructor: Yeah, water jackets because it’s actually your radiator, **isn’t it**↓  
(Statement-question blend) [CLASSROOM]

**2.1.4.4. Desired action.** Barron, Pandarova, and Muderack’s (2015, 507) category of ‘desired action’ TQs is similar to Axelsson’s (2011, 72) exchange of ‘goods and services’. Desired action TQs include commands (9), and suggestions (10).

- (9) ... you have to strip the engine, **don’t you**↑ (Desired Action, Directive) [Mixed WORKSHOP-CLASSROOM]  
(10) So let’s go back to the question, **shall we**↑ (Desired Action, Suggestion) [CLASSROOM]

## 2.2. Participation frameworks

The teacher talk in our study, situated in two different contexts, is described here by reference to Goffman's (1981) concept of participation frameworks. The idea of participation frameworks, which take account of the interactional roles played by participants in an interaction, has been used to consider classroom teaching (e.g. Cobelas Cartagena and Prego-Vázquez 2019). In the focused interactional context of teacher-fronted classroom teaching, participant roles are well-defined. The teacher has greater rights than the students to speak, and the teacher plays a key role in assigning turns. This participation framework has been analysed in terms of the Initiation-Response-Evaluation (IRE) structure (Mehan 1979; Sinclair and Coulthard) in which the teacher asks a question, a student answers it and the teacher evaluates the answer. Building on these early descriptions of classroom discourse, scholars over the last several decades have explored this participation framework. They have documented variation in IRE sequence organisation (Seedhouse 2004), in the effect of teachers varying their questioning strategies in the Initiation move (e.g. Dalton-Puffer, 2007). Students' agency in their participation (Waring 2011) has also been explored, as has the variation in the teacher's evaluation move, which is contingent on the students' Response move (Lee 2007; Margutti and Drew 2014). The participation framework of teacher-fronted classroom teaching is thus well-known. We refer to this participation framework as *CLASSROOM* in this study.

The second participation framework in this study, which we refer to as *WORKSHOP*, differs from the *CLASSROOM* participation framework in three ways. Firstly, *WORKSHOP* interaction differs most importantly in the number of people taking part in the interaction: rather than interacting with a group of students as teachers do in teacher-fronted classroom teaching, in the workshop or building site the instructor interacts with single students, pairs or small groups. Students therefore have greater opportunities to take turns in this context. Secondly, *WORKSHOP* interaction differs in what is being taught: the goal of this teaching is the learning of process skills; this is in contrast to the goal of the *CLASSROOM* teaching, which is student learning of content. Thirdly, *WORKSHOP* interaction took place outside of a regular classroom, on a building site or in a workshop. The goal of the teaching and learning and the number of interactants both affect the nature of the talk. Although the IRE is still possible in this context, it is less frequent. Talk in this participation framework is not identical with conversation, but it has similarities in the greater turn taking rights of students than is the case in the classroom, and in the greater likelihood that teachers will ask information-seeking rather than information-testing questions.

Similar participation frameworks to *WORKSHOP* are discussed by Lindwall, Lymer, and Greiffenhagen (2015) who firstly analyse one-to-one instruction in craft (crocheting) and then interaction between teacher and three students at a tutorial session on how to write fieldwork reports. As in the interaction in the workshop or building site in our study, both these instruction sequences involve the student(s) being taught a skill rather than being taught content. The instruction during craft interaction resembles our workshop/building site data in that the students are actively engaged in doing the task and the teacher is able to see how they are doing it and give advice and assistance that shifts the student closer

to the ideal achievement of the task. As Lindwall, Lymer, and Greiffenhagen (2015, 149) say, the instruction is contingent on the teacher noticing some problem in the student’s actions and is ‘occasioned by and designed to address the specific issues and problems that the student has encountered’.

### 3. Method

#### 3.1. Context of the study

This study took place in post-secondary vocational education in New Zealand. Four different vocational ‘trades’ were included: the engineering trades of automotive technology and fabrication, and the construction trades of carpentry, and plumbing. The study is part of a broader investigation of the register of ‘trades talk’ in an educational setting, the overall purpose of the study being to support student acquisition of this register. Instructors were recruited via in-person requests by a member of the research team, with data for the study being collected in 2015 and 2016.

Students in this context were taught in small groups of about 16 students. As described above, teaching took place in two participation frameworks, referred to by us as `CLASSROOM` and `WORKSHOP`. The `CLASSROOM` participation framework was situated in classrooms and involved teacher-fronted whole-class teaching. Like content teaching in schools and many university classrooms, teaching in `CLASSROOM` interaction involves a mix of short monologues by the instructor explaining concepts, as well as IRE question-answer dialogue that functions to check student understanding of this content. An example is shown in (11):

(11)	Monologue	Instructor: Another thing too guys is stormwater drains tend to be a lot more accessible, because they tend to be bigger pipes because we have ... when we allow for stormwater, we can allow just for every rainfall ... We have to allow for those big dumpers, <sup>1</sup> so there is going to get rid of the water, eh? Ok, so [...] they might have a 150 or 6 inch sewer, the stormwater will probably be an 18 inch, ok? So it is almost twice ... over twice the size ... [...] 450 mil pipe, ok? Cos when you get a really heavy dump, you’ve got to get rid of the water, otherwise that is where you get your flooding, ok? Alright? So, what else? What else is an example of a confined space? [...]
	Question	
	Answer	Student: Water tanks?
	Evaluation	Instructor: Exactly, water tanks. They are a confined space. [Classroom]

The `WORKSHOP` interaction took place on the construction site and in the workshop. Working alone, in pairs or small teams, students acquire facility with tools and machinery, and learn to manufacture items, build a house or repair engines. Teachers circulate amongst and interact with the individuals or groups, as in (12).

(12)	Instructor:	Yep, that’s right, so we’ll just give that a wriggle, <b>should we</b> ↑ It’s maybe just the paint that’s holding it, so... [noise of student following instructor’s directions]
	Instructor:	Just give it a tap, drop it on one of these screwdrivers... I think, there we go, just using the weight on these...
	Student:	Yeah, got it! [WORKSHOP]



### 3.2. Corpus

The data was recorded by the vocational instructors, who wore audio-recording devices. Nineteen instructors (18 speakers of New Zealand English and one of British English) agreed to participate in the study; students also agreed to instructors wearing audio-recording devices.<sup>2</sup> Because the recorders were worn by the instructors, far less student talk than instructor talk was recorded. Thus, whether a TQ was followed by a response is not always clear. Because not all student speech could be recorded, the corpus includes the instructor speech only, a total of 394,671 words of spoken discourse. The decision of where and when to record their teaching was made by the participating instructors. Although all instructors taught in both the classroom and the workshop/building site, some chose to record their teaching in only one context, while others recorded their teaching in both contexts.

Part of this data (162,193 words) was collected in classroom teaching, and involved the CLASSROOM participation framework; part was collected during teaching in the workshop or building site (147,937 words) and involved the WORKSHOP participation framework; and part (84,541 words), although it was collected in the workshop or building site, included some teacher-fronted whole-class teaching; it thus mixed the CLASSROOM and WORKSHOP participation frameworks. During these 'mixed' sessions, the instructors spent part of the time interacting with the class as a whole, and part with the students working individually. It is impossible to reliably distinguish in these mixed lessons whether each instance of a tag question occurred in the CLASSROOM or WORKSHOP part of the lesson, so the quantitative comparison in [Section 4](#) is between only the CLASSROOM and WORKSHOP parts of the corpus.

### 3.3. Analysis of corpus

The coding system in this study follows the work of Axelsson (2011), Barron, Pandarova, and Muderack (2015), and Kimps, Davidse, and Cornillie (2014) which is described in [Section 2](#) above. Data was imported into Wordsmith Tools (Scott 2012), and each TQ was coded for polarity, position in turn, intonation, and speech function. Because interaction was not video-recorded, non-verbal responses, such as gestures, head nodding or eye contact, are not accounted for. Therefore, it was through careful listening to the recordings and a deep analysis of the context that analytical decisions were made. A similar approach is found in other corpus studies of tag questions such as Barron, Pandarova, and Muderack (2015).

## 4. Quantitative results

In this section we analyse our results quantitatively to address the first two research questions concerning the frequency and function of TQs in CLASSROOM and WORKSHOP teaching.

### 4.1. Frequency of tag questions

Our corpus had 755 tag questions in 394,671 words, 19.13 TQs per 10,000 words. This is near the 16.98/10,000 words reported for New Zealand English conversation (Holmes 1982),<sup>3</sup> and is within the range for British English conversation: lower than the 25.41/10,000 words reported by Barron, Pandarova, and Muderack (2015) but higher than the 13.72/10,000 words reported by Kimps, Davidse, and Cornillie (2014). Frequency of TQs in our corpus was slightly higher in WORKSHOP teaching (20.48/10,000 words) than in CLASSROOM (17.88/10,000 words). However, the speech functions of the TQs in these different participation frameworks varied markedly, as we show below.

### 4.2. Speech functions of tag questions in CLASSROOM and WORKSHOP teaching

As Table 1 shows, most TQs in the CLASSROOM teaching functioned as statements (75.5%). CLASSROOM teaching constructs the instructor as already having information and passing it on to the students, with student contribution largely limited to responding to instructor questions. This is not to downplay the engaging function of statement TQs in CLASSROOM teaching, discussed qualitatively below. A large minority of TQs in CLASSROOM teaching (21.0%) functioned as statement-question blends, where the instructor perhaps sought acknowledgement of understanding, even if this might have been limited to facial expression or nodding. Almost no TQs in CLASSROOM teaching functioned as questions (2.4%).

In contrast, in WORKSHOP teaching, statement-question TQs were most frequent (45.2%), where the speaker 'indicates the relevance of' the addressee's knowledge of the topic (Kimps, Davidse, and Cornillie 2014). One third (30.4%) were statements, and 22.1% were questions, where instructors sought information from the students. In WORKSHOP teaching instructors help students solve problems, interacting with students individually or in pairs, making student contributions more possible. Thus, instructors were more likely to seek information from students (question TQs) and seek verbal acknowledgement of students' knowledge of the topic (statement-question TQs).

As can be seen in Table 1, the proportion of question TQs, statement-question TQs, and statement TQs in WORKSHOP teaching is similar, although not identical, to the proportions quoted for conversation by Kimps, Davidse, and Cornillie (2014). In contrast, the proportions in CLASSROOM teaching are very different from conversation, with a much lower proportion of question TQs in CLASSROOM teaching than in conversation and a much higher proportion of statement TQs.

These frequency differences reflect the nature of interaction in CLASSROOM and WORKSHOP teaching. In CLASSROOM teaching the instructor is a primary knower, passing on knowledge to students, from whom there is limited opportunity for vocal input. In contrast, WORKSHOP teaching is more like conversation, both in the lower number of addressees and in the likelihood of the instructor seeking information from the students (e.g. about students' actions).

Because the frequency of directive TQs is low, they are not discussed here; we return to them in our qualitative discussion below. Additionally, because it is impossible to distinguish WORKSHOP and CLASSROOM teaching in the mixed WORKSHOP-CLASSROOM teaching, frequencies from this part of the corpus are not discussed. They are included in Table 1 in order to show the data for the study as a whole.

**Table 1.** Frequency of TQs in CLASSROOM and WORKSHOP teaching.

	CLASSROOM teaching	WORKSHOP teaching	Mixed CLASSROOM & WORKSHOP	Total	Conversation (Kimps, Davidse, and Cornillie 2014) <sup>4</sup>
Questions	7 (2.4%)	67 (22.1%)	18 (11.1%)	92 (12.2%)	22.6%
Statement-question	61 (21.0%)	137 (45.2%)	72 (44.4%)	270 (35.8%)	50.1%
Statement	219 (75.5%)	92 (30.4%)	66 (40.7%)	377 (49.9%)	23.6%
Directive/Suggestion	3 (1.0%)	7 (2.3%)	6 (3.7%)	16 (2.1%)	3.7%
	290	303	162	755	

### 4.3. Distribution of speech functions of TQs across speakers

The number of words contributed by instructors varied quite substantially, from 1716 to 92925 (see Table A1), with a mean of 20772 and median of 14347. Similarly, TQs per 10,000 words varied from 0 to 52.2, with a mean of 14.0, 95% confidence interval (7.95, 20.05); the median is 11.9. Thus, the influence of individual speaker style should certainly be acknowledged, although such variation in style is to be expected. A Pearson's correlation to test whether individuals with a high word count also tend to have a high TQ frequency was run. Pearson's correlation coefficient,  $r = 0.4035$  ( $p = .087$ ), indicates that although there is technically a positive correlation, the relationship between these variables is weak. The question of whether the distribution of TQ types varied across contexts (classroom and workshop/building site) is an important one which we address below.

The distribution of question, statement-question, statement and directive/suggestion TQs for individual instructors was tested to see whether it was similar to that reflected in Table 1 for all teaching. Distribution was tested for instructors who produced 10 or more TQs in one or both of the CLASSROOM and WORKSHOP contexts. Table 2 shows the distribution for the four instructors who each produced more than 10 TQs in the CLASSROOM context.

**Table 2.** Distribution of TQs for individual speakers in classroom teaching.

	Instructor B	Instructor C	Instructor E	Instructor G	All CLASSROOM teaching
Questions	3 (1.4%)		1 (4.3%)		7 (2.4%)
Statement -Questions	43 (19.7%)	2 (20%)	7 (30.4%)	3 (16.7%)	61 (21.0%)
Statement	170 (78%)	8 (80%)	15 (65.2%)	15 (83%)	219 (75.5%)
Directive-suggestion	2 (0.9%)				3 (1.0%)
	218	10	23	18	290

**Table 3.** Distribution of TQs for individual speakers in workshop/building site.

	Instructor A	Instructor B	Instructor C	Instructor F	Instructor K	All WORKSHOP teaching
Questions	22 (24.4%)	5 (13.5%)	4 (6.3%)	5 (13.9%)	16 (41.0%)	67 (22.1%)
Statement -Questions	41 (45.6%)	16 (43.2%)	24 (38.1%)	25 (69.4%)	17 (43.6%)	137 (45.2%)
Statement	24 (26.7%)	15 (40.5%)	34 (54%)	6 (16.7%)	5 (12.8%)	92 (30.4%)
Directive-suggestion	3 (3.3%)	1 (2.7%)	1 (1.6%)		1 (2.6%)	7 (2.3%)
	90	37	63	36	39	303

**Table 4.** Relationship between speech function and polarity of TQs in teaching.

Speech function	Positive- positive	Positive- negative	Negative- positive	Negative-negative	Total
Question	48 (52.2%)	40 (43.5%)	4 (4.3%)	0	92
Statement-question	10 (3.7%)	232 (85.9%)	26 (9.6%)	2 (0.7%)	270
Statement	5 (1.3%)	289 (76.7%)	80 (21.2%)	3 (0.8%)	377
Desired action	3 (18.8%)	13 (81.2%)	0	0	16

These four instructors together produced 93.7% of the TQs in the CLASSROOM context. There is good similarity in the distribution of question, statement-question, statement and directive/suggestion TQs for Instructors B, C and G and that shown in [Table 1](#) for the group as a whole. The similarity for Instructor E was slightly less good.

[Table 3](#) shows the distribution of question, statement-question, statement and directive/suggestion TQs of the five instructors who each produced 10 or more TQs in the WORKSHOP context. These five instructors together produced 86.6% of the TQs in WORKSHOP interaction. There was greater variation between the five instructors than was found in the CLASSROOM context. Nevertheless, each of the five instructors produced a relatively high proportion of questions and a relatively low proportion of statements by comparison with findings for CLASSROOM teaching.

#### 4.4. Speech function and polarity of TQs

[Table 4](#) shows that positive-negative polarity is the most common polarity for all speech functions except questions, where positive-positive polarity is much higher than would be expected if there were no association between speech function and polarity. This high positive-positive polarity in question TQs aligns with Kimps' (2007) finding of a high degree of responsibility for the hearer to respond to positive-positive TQs. Positive-positive polarity was low in statement TQs.

#### 4.5. Speech function and position in turn

[Table 5](#) shows that turn-final position is the most common for all speech functions, with turn-embedded TQs frequent only for statement TQs. Their higher likelihood of being turn-embedded confirms that statement TQs do not really seek a response: the speaker does not pause for response, merely continuing with what they are saying.

**Table 5.** Distribution of speech functions across turn position in teaching.

Speech function	Turn-final	Turn-embedded	Total
Question	87 (94.6%)	5 (5.4%)	92
Statement-question	259 (95.9%)	11 (4.1%)	270
Statement	253 (67.1%)	124 (32.9%)	377
Desired action	13 (81.2%)	3 (18.8%)	16

**Table 6.** Turn position in CLASSROOM teaching, WORKSHOP teaching, and conversation.

	Turn-final	Turn-embedded
<small>CLASSROOM</small>	218 (74.8%)	73 (25.2%)
<small>WORKSHOP</small>	256 (84.5%)	47 (15.5%)
Conversation (Kimps, Davidse, and Cornillie 2014)	624 (70%)	268 (30%)

Table 6 shows that compared with CLASSROOM teaching, more TQs in WORKSHOP teaching were turn-final, indicating more expectation by instructors of a verbal response in WORKSHOP teaching. This is expected, as the CLASSROOM teaching was set in a regular classroom context where students had fewer opportunities to speak because instructors were interacting with the class as a group rather than individually. Table 6 also indicates that in terms of turn position, there is a greater proportion of turn-final TQs in WORKSHOP teaching compared with conversation (Kimps, Davidse, and Cornillie 2014). This suggests an even greater expectation of student response to TQs in WORKSHOP teaching than in conversation.

#### 4.6. Speech function and intonation

Table 7 shows that falling intonation is more frequent than rising intonation for all speech functions except question TQs. This confirms that question TQs do serve the function of questions, as rising intonation suggests the speaker expects an addressee response. Table 7

**Table 7.** Distribution of speech function across intonation in teaching.

Speech function	Rising	Falling	Total
Question	68 (73.9%)	24 (26.1%)	92
Statement-question	31 (11.5%)	239 (11.5%)	270
Statement	13 (3.4%)	364 (95.6%)	377
Desired action	6 (37.5%)	10 (62.5%)	16

also shows that few statement TQs have rising intonation, confirming that the speaker expects no verbal response.

Table 8 compares intonation patterns in CLASSROOM and WORKSHOP teaching, and conversation. TQs in CLASSROOM teaching usually had a falling intonation, suggesting little expectation of a verbal response, while in WORKSHOP teaching a greater proportion of TQs had rising intonation, suggesting greater expectation of a verbal response. In this,

**Table 8.** Intonation in CLASSROOM and WORKSHOP teaching, and in conversation.

	Rising	Falling	Rise-fall	No pitch change
CLASSROOM	21 (7.2)	269 (92.8%)		
WORKSHOP	74 (24.4%)	229 (75.6%)		
Conversation (Kimps, Davidse, and Cornillie 2014)	187 (21%)	607 (68%)	27 (3%)	71 (8%)

WORKSHOP teaching has greater similarities to conversation (Kimps, Davidse, and Cornillie 2014) than CLASSROOM teaching, which is very different from conversation.

In summary, this quantitative analysis has shown that the overall frequency of TQs in vocational teaching is similar to the frequency in conversation. It shows also that although the frequency of the speech functions of question, statement-question and statement in WORKSHOP teaching showed similarities to conversation, speech function frequencies in CLASSROOM teaching were very different from conversation. TQs were more likely to be questions and less likely to be statements in WORKSHOP teaching compared to CLASSROOM teaching. This suggests the greater opportunities for students to speak in WORKSHOP than in CLASSROOM teaching. Another finding suggesting the

greater opportunities for students to take a turn in *WORKSHOP* compared to *CLASSROOM* teaching was the greater frequency of TQs in turn-final position in *WORKSHOP* teaching compared with *CLASSROOM* teaching. This quantitative analysis also confirms the association between rising intonation and questions and between turn-final position and questions reported by Kimps, Davidse, and Cornillie (2014). Similarly, it confirms the association between statements and turn-embedded position and falling intonation.

## 5. Qualitative results and discussion

In this section, we examine our data qualitatively in further consideration of the functions of TQs in *CLASSROOM* and *WORKSHOP* interaction (Research question 2). We also consider the pedagogical functions that TQs play in these two participation frameworks (Research question 3).

### 5.1. Exchanging information: questions

As shown quantitatively above, question TQs were less frequent than statements or statement-questions in both *CLASSROOM* and *WORKSHOP* interaction. In *CLASSROOM* interaction, only 2.4% of TQs were questions (Table 1) compared to 22.1% in *WORKSHOP* teaching. This low proportion in *CLASSROOM* teaching is expected, because this participation framework affords students fewer opportunities to take a turn. In this context, the instructor's role is more focused on passing on information to students rather than seeking it.

In *WORKSHOP* teaching, the instructor poses questions to the students more frequently, as there is more personal interaction between them in this participation framework. Question TQs in *WORKSHOP* teaching mostly involved the instructor discussing or checking the quality of the students' *WORKSHOP* actions, as in (13) and (14), where the instructor does not know the answer and seeks information that only the student has.

(13) Instructor: Hang on, hang on, hang on . . . come back here, you know how to check a relay,  
**don't you**↓

Student: I do

Instructor: So you do it right now. [WORKSHOP]

(14) Instructor: Have you put tap right through it, **have you**↑ Yeah↑ Well . . . it's more likely to  
be this stretch here than the tap [WORKSHOP]

It is clear in (14) that the instructor wants a response, as the *Yeah*↑ with a rising intonation that follows the TQ indicates that an answer is expected. In each case, student engagement is necessary, as the student has information that the instructor lacks and is requesting from them.

### 5.2. Exchanging information: statement-questions

As discussed above, in statement-question blends, both the speaker and addressee know about the event, but the speaker still expects a response, thus encouraging student engagement. In some cases, the speaker, in this case the instructor, positions themselves as more knowledgeable, as in (15).

(15) Instructor: Where do we get water under the ground? Artesian water,  
**don't we**↓.

Student: Yeah

Instructor: How many times you guys ever dug a fence post? And you go down in the ground that much and next thing you know you hit water ... [CLASSROOM]

In (15), the instructor seems to view the students as understanding the concept of groundwater, but perhaps as being unfamiliar with the term 'Artesian'; hence, he pauses for a response, before continuing his explanation. In instances like this, it is unclear if the instructor is pausing on purpose, to elicit a response, or if a student is interjecting with a 'yeah'. It is probable that neither participant knows at the time either, and the dynamic interaction of the classroom steers the actions and reactions between instructors and students. It is also possible that, as Othman (2010) reports, the instructor used non-verbal means, like eye-contact, expression, gesture etc. to elicit a response, but without video-recorded data, this information is unavailable.

In (16), the instructor double-checks his arithmetic, and asks the student to confirm his calculations, thus constructing the student as a co-expert, who, like the instructor, has relevant knowledge (A-B event). Engagement is expected from the students not only verbally, but also in the form of the thought involved in calculation. As Csomay (2002, 2012) also found, the student turns in our data are short and this is reflected in the one or two-word answers in (13), (15) and (16).

(16) Instructor: Now remember ... we're allowing 20 mil overhang and 20 mils here overhang, so that's 720, **isn't it**↓.

Student: Yep.

Instructor: So times 720 ... so that's your bit of steel [WORKSHOP]

Interestingly, we found that not all statement-questions elicited a 'yes'/'no' response. Sometimes, the TQ prompted a reaction like laughter from the students. In (17) this seems to result from a shared joke, apparently related to an item in a list of ways of keeping the workshop tidy.

(17) Instructor: it's logical guys, you're cleaning up so A and C, yes. D is a load of bollocks. I'm not even going to comment on E but you know the answer to E, **don't you**↓

Students: [laughter and chatter]

Instructor: [laughter] You've got to clean it up. [Mixed WORKSHOP-CLASSROOM]

In (18) we see a statement-question, where the student does not respond to the question, but acknowledges it by reacting to it and posing their own solution, thus showing full engagement in the interaction. As described in Lindwall, Lymer, and Greiffenhagen (2015), it is clear in this interaction how the instructor and student work on solving a problem together. This example makes clear the extent to which this student positions him/herself as knowledgeable and as eligible to make suggestions independently. Interestingly, these more extended student turns in (18) occur in the WORKSHOP data.

(18) Instructor: How's it working out? What you might have to do ... sometimes with a cable like that ... you put a tie around it.

Student: It is working ... I'm just not getting the returns. I need to figure out where to position a spring. There's no return ... so when you squeeze the trigger, it's holding.

Instructor: I'm wondering whether we ... oh that's not going to make any difference. It looks to me ... see this cable is a bit manky, **isn't it**↓.

Student: I'm wondering ... if we swap that spring over ... [WORKSHOP]

In some CLASSROOM teaching, statement-questions developed from the instructors testing the students' knowledge. Here, the answer to the question being asked is known to the teacher, making this a 'display question' (Dalton-Puffer 2007). Both TQs in (19) ask for agreement with what the instructor is saying, constructing the students as already knowledgeable. The instructor uses silence to indicate his expectation of a response, and a student responds. The five second wait time suggests that student engagement in the form of thinking is necessary.

(19) Instructor: What can combustible gases and vapours ... ? What's the problem with them?  
It's a threefold problem with them, **isn't it**↓.

[five second pause]

Student: Explosion.

Instructor: Explosion is one of them, **isn't it**↓. [CLASSROOM]

### 5.3. Exchanging information: statements

The quantitative analysis showed that statement TQs were more frequent in CLASSROOM teaching (13.50/10,000 words) than in WORKSHOP teaching (6.22/10,000 words). Regarding turn position, in both participation frameworks, the proportion of turn-final TQs is higher than turn-embedded TQs (Table 6). However, this proportion is much higher in CLASSROOM (25.2%) than in WORKSHOP (15.5%). This may reflect the instructor in CLASSROOM teaching avoiding relinquishing the floor, or providing explanations, which apply to the task at hand, as in (20). The instructor asks the student to engage intellectually, firstly, by reminding the student of information already learnt from an instruction given earlier (*I said the end didn't I*); this finding of TQs reminding students of prior knowledge agrees with that reported by Mohr (1996). The instructor then asks the student to reflect on the practical implications of this information (*where would we put the taps*). Lack of video means we don't know whether the student responded by nodding, facial expression or action. The TQ in (20) refers to information that the instructor believes the student already knows, so this is information known to both parties, as Hepburn and Potter (2010) also found in their analysis of turn-embedded TQs in helpline interaction.

(20) I said the end, **didn't I**↓ not the side. Ok? So if you look here, if the plug end was there, where would we put the taps? So put the taps here? There's no wall ... [Mixed WORKSHOP-CLASSROOM]

Comparing teaching in the two participation frameworks, in CLASSROOM teaching there are pauses after turn-final TQs, but because the context is a CLASSROOM lecture, students are not as encouraged to interject as they are in WORKSHOP teaching. This reflects the fact that in classroom teaching, one of several tasks that teachers need to perform is sticking to the topic they are developing (Seedhouse 2004). 'Doesn't it' in (21) encourages students to think about and consider whether they accept the logic of the 'heavy gases' pushing the air out, without the instructor relinquishing the floor. As reported in Thwaite (2014),



asking for the students' agreement elevates the students by suggesting that the instructor views them as able to make this judgment. It may be that an instructor is looking for a nod of acknowledgement, but we are unable to tell from audio recordings. There is a brief pause after 'doesn't it', but it is not long enough to make a claim that the instructor was eliciting feedback.

- (21) So even you open the lid of a vat, all those heavy gases will stay in that vat, they'll just push all the air out **doesn't it**↓ ... So, you know, most accidents involving confined spaces is asphyxiation. [CLASSROOM]

Although statement TQs (like those in (20) and (21)) are 'not real questions', this does not mean they are unimportant in engaging student attention, and ultimately teaching content and skills. With each tag question, the instructor is encouraging student attention to what has just been said, as in (20). In (21) the instructor uses the tag to encourage students to exercise logical thought about how *all those heavy gases* will behave. By encouraging agreement, and by implying the students already know what the instructor is talking about, the TQs function to engage students' attention and to view themselves as already knowledgeable about the trade.

#### 5.4. Exchanging goods and services: desired action

Kimps, Davidse, and Cornillie (2014) distinguish commands/suggestions, which benefit the speaker, from advice, benefitting the addressee. However, in the classroom, commands are assumed to benefit the addressee, as their purpose is student learning, not instructor benefit. The distinction between commands and advice is also unclear, as instructor advice can have the illocutionary force of a command. For reasons of politeness, instructors often couch commands as suggestions. We therefore grouped these types as 'desired action' rather than drawing on the speaker/addressee benefit distinction to distinguish commands, suggestions and advice.

In our data, most desired action TQs were motivated by accomplishing a task, as in (22) and (23) below. In (22) the TQ asks the student to agree about where the nut should be welded. This elevates the student by assuming they have expertise, although the instructor's next instruction to 'go and look at the sample' makes it clear their expertise may be incomplete.

- (22) Instructor: Now you weld the nut on there, **don't you**↑ Go and have a look at the sample one because you've got to weld the nut on top of the thread too.  
[WORKSHOP]

In (23), although still directing a desired action, the instructor uses 'we' (not 'you') to communicate this. The instructor follows up with an imperative, *Just take it slight to the right*. The student will do this activity, not the instructor, but use of inclusive 'we' softens the instruction, suggesting a joint activity. Inclusive 'we' is also seen in (24) below. Instances (22) and (23) construct the student as a co-expert, also able to exercise judgment.

- (23) Instructor: You need to mark the centres, ok? What we'll do in that instance ... it doesn't really matter too much. We can take it to the right, **can't we**↓.  
Student: Yeah

Instructor: Just take it slight to the right because it doesn't matter for that, **does it**↓. [WORKSHOP]

'Shall we' was used for suggestions, as Axelsson (2011) also found. The suggestion in (24) to *do that triangle first* draws the students into action that the instructor is taking, encouraging the student's intellectual participation in these activities. As in (22) and (23), the instructor expects a response, in the form of an action.

(24) Instructor: We don't start with those: we always start with a triangle, so let's do that triangle first, **shall we**↑ [Mixed WORKSHOP-CLASSROOM]

### 5.5. Speech functions and student engagement

When instructors use question TQs, they clearly expect an answer from student(s); similarly, instructors using statement-question blends also expect input from students, even if only a nod of acknowledgement. Desired action TQs also demand student engagement in the form of an action. These three types of tag questions clearly encourage student engagement in the learning process. With statements, however, no response, whether verbal or action, is expected. From this, should we conclude that statement TQs do not function to engage students? If this were the case, their presence in talk, whether in conversation or in teaching, would be redundant. In fact, as reported by Michalovich and Netz (2018) and by Chen and He (2001), even if no verbal response is forthcoming, TQs function to maintain students' attention. TQs functioning as statements play a vital role in encouraging listener engagement. They do this by seeking agreement, even if only in thought. Statement TQs seek listener agreement at the very moments when speakers, whether in conversation or teaching, are not willing to give up the floor to the hearer, but want to keep the listeners' intellectual focus on what is being said. We see this desire to retain the floor in (25), where the instructor limits the likelihood of a student response interrupting the main point (that safety precautions minimise the hazard), while using the TQs to keep students' attention engaged.

(25) Instructor: the fact is you're gonna have to work in a controlled space. See, you are never going to eliminate it, **are you**↓ You can't isolate it as such, **can you**↓ cause you have to go and work in there, so what we do is we minimise. We minimise it by putting all the safety precautions

This function of TQs in encouraging listeners' intellectual engagement makes them an essential resource in teaching and learning. Through their use, the instructor signals to the listeners the need to keep intellectually engaged on the ideas in the lesson.

### 5.6. Polarity and student engagement

As in previous studies (e.g. Axelsson 2011), most TQs had positive-negative polarity. This predominance of positive anchors followed by a negative tag as in (26) suggests that instructors use TQs to encourage their students to agree with positive statements they make. In (26) the instructor seems to believe that the students already know about the valves and their function. The anchor reminds the students of these facts. This finding that some TQs construe addressees as also having knowledge of an event/fact (AB event) is

also reported in Heritage and Raymond (2005) and Hepburn and Potter (2010). Through this means, TQs are important in focusing student attention on the instructor's encouragement in the anchor clause to exercise judgment about skills, as in (23), or to learn terminology and the function of technical equipment (26).

- (26) they're actually non-return valves, **aren't they**↓. Alright? All the non-return valves ... it just stops the water going back the other way, **doesn't it**↓, simple as that [CLASSROOM]

The second most common polarity was negative-positive ((27) and (28)). The instructor encourages students to agree with him, this time using declarative clauses that state what is not the case. In (27) the instructor reminds students what terminology *we* cannot use, *we* being all who are knowledgeable about the trade, including the students; the tag *do we* asks for students' agreement, also implying students' agreement that they were already aware of this. In (28) the instructor draws a student's attention to a problem with the item that the student is making, guiding the student also to exercise judgment about the problem.

- (27) We don't call it a stack, **do we**↓. We don't call it a stack anymore [CLASSROOM]

- (28) Instructor: it's going to sit down on that ... it's uneven, it's not flat, **is it**↓

Student: Oh right [WORKSHOP]

Positive-positive TQs 'echo a previous statement or draw a conclusion from something a previous speaker has said' (Biber et al. 1999, 209). Kimps' (2007, 289) study of constant polarity TQs found that they 'typically exhibit a low degree of commitment towards the truth of the proposition by the speaker'. However, our data shows no evidence of a low degree of speaker commitment in positive-positive TQs, which may reflect the teaching context: instructors are unlikely to show the scepticism towards student utterances. In (29), a positive-positive TQ is used in checking on students' work in the workshop.

- (29) Have you set these to 127 ... sorry? And that worked out pretty right, **did it**↑ the pitch of the circle thing, when you got back to the other side ... did it line up? [WORKSHOP]

As shown in Table 4, most TQs with positive-positive polarity functioned as questions, suggesting expectation of a student response and confirming Kimps's (2007) finding of a high degree of responsibility on the part of the hearer to respond to positive-positive TQs. In Example (29), the tag question builds on discussion that immediately precedes it. The instructor adds another question immediately after the TQ suggesting that a response is expected. In (30), which functions as a question, the instructor helps the student solve a technical problem, and models solving a problem. The tag questions involve the student in the problem solving.

- (30) got to find one of these that fits because half of them are missing out of the ... Is that down hard, **is it**↑ sitting down hard ... **is it**↑ you've got to give it another tap on the top to make sure it's right down hard. Put your hand over the top when you hit it [WORKSHOP]

## 6. Discussion and conclusion

How do TQs in CLASSROOM and WORKSHOP teaching compare? The quantitative analysis showed that the frequency of speech functions of TQs in WORKSHOP and CLASSROOM teaching is markedly different, with CLASSROOM teaching making heavy use of statement TQs, and almost no use of

question TQs. This reflects the classroom context where instructors seek to pass on a body of conceptual knowledge, thus construing themselves as primary knowers. In contrast, in *WORKSHOP* teaching, instructors make much higher use of question TQs and much lower use of statement TQs. Our quantitative comparison between TQs in these two contexts and in conversation shows that *WORKSHOP* teaching is quite like conversation, while instructor-fronted whole-class *CLASSROOM* teaching is quite different from conversation.

These differences reflect the multiple addressees in *CLASSROOM* teaching, while *WORKSHOP* teaching involves one or two addressees, as in conversation. It also reflects the very different functions of these two teaching contexts: content-transmission during whole-class *CLASSROOM* teaching, compared to the guiding of individuals or student pairs in the acquisition of process skills during practical work and engaging them in the problem-solving appropriate in the trade. In the workshop or building site, students more often have knowledge that the instructor lacks, raising the likelihood for the instructor to employ question TQs. Equally, as seen in (18) students are more likely to construct themselves as knowledgeable and able to make suggestions for solving problems. In this way instructors and students participate in constructing the *WORKSHOP* and *CLASSROOM* contexts. In *CLASSROOM* teaching, instructors use statement TQs and statement-question TQs to engage students in the lesson. In *WORKSHOP* teaching, question TQs are used more often, as students have knowledge that the instructor does not.

Descriptions of classroom discourse (e.g. Cazden 2001; McHoul 1978; Mercer 2007; Garton 2012; Petitjean 2014; Gardner 2015) point out how the structure of classroom discourse involves limitations in terms of student participation. These limitations are consequent on the pressure on teachers to explain the content of the lesson (Seedhouse 2004), thus encouraging extended instructor turns. In addition, students need to be able to hear and focus on these explanations; interrupting the explanation might interfere with this. Csomay (2002) reports that length of student turns is shorter in undergraduate classes, such as those in this study. In these circumstances of limited student opportunities to speak, as Barbieri (2015) suggests, the linguistic characteristics of teacher talk can heighten teacher affect and involvement. This study shows that in addition, features of instructor talk can serve to heighten student involvement and that TQs are one discourse feature that facilitate student engagement in several ways.

Firstly, as argued above, statement TQs include students intellectually in the ongoing explanation by focusing students' attention on concepts and encouraging them to reflect on them. Secondly, statement-question TQs remind students that they already know something and encourage acknowledgement like nodding, facial expression or verbal agreement (Axelsson's (2011) AB events). Statement TQs are particularly common in *CLASSROOM* teaching, as are statement-question TQs. Nevertheless, as our qualitative discussion above shows, both types do serve to encourage student engagement whether in the form of silent thought or through nods or verbal responses. Similar observations concerning the role of TQs in fostering student engagement were made by Mohr (1996) and Syler (2016) for canonical tags and by Chen and He (2001) in relation to invariant tags.

Tag questions functioning as questions involve more overt student engagement in the classroom discourse. These are common in *WORKSHOP* teaching and almost absent from *CLASSROOM* teaching. They function like canonical questions in the sense that they require a verbal response from students. As a discourse feature that is woven throughout the instructor's talk, they are important in encouraging engagement. It should be noted

however that the answers evoked are usually of the yes/no type, because TQs encourage agreement from the addressee, making these TQs less encouraging of extended verbal response than, for example, wh-questions would be (Csomay 2002, 2012). TQs functioning as questions can be referential questions (Dalton-Puffer 2007), as discussed in regard to Examples (13) and (14) where the teacher is a secondary knower who seeks information from the students (B-events). They can also function as display questions (Dalton-Puffer 2007), as discussed in connection with Example (27), where the teacher knows the answer, but checks the students' understanding of concepts (AB events). Desired action TQs, functioning as commands and suggestions, engage students by demanding an overt response in the form of student action as in (22), (23) and (24).

The analysis in this article suggests a major role for TQs in engaging learner thought and reflection, in providing learners opportunities for brief responses such as nods and verbal agreement, and in requiring information or action. They thus help to ameliorate the limited opportunities for individual student talk that studies have identified as a feature of classroom teaching.

### 6.1. *Limitations of the study and suggestions for future research*

Limitations of this study concern the data-collection method. Firstly, because data was collected via recorders worn by the instructors, this limited the amount of student talk that could be collected in the classroom context. A second limitation was that there were no video recordings of the classroom interactions, and therefore this analysis does not include gestures and other non-verbal signals from instructors and students. Future studies that were able to collect student talk and video-recorded data would potentially produce findings which provide a more comprehensive account of whole group patterns of use with a stronger focus on turn-taking and non-verbal gestures. A third limitation was that because instructors controlled the amount and context in which data was recorded, instructors made variable contributions to the amount of the data. Future studies might also be able to control the amount of contribution to the corpus of individual instructors.

### Notes

1. Heavy rainstorms.
2. Ethics approval for the study was granted by [anonymised] University Human Ethics Committee no. 19,989.
3. Holmes (1982) reports 73 tags in a 43,000-word corpus.
4. For comparability, the percentages reported for Kimps, Davidse, and Cornillie (2014) omit their instances in addressee responses, which are not reported in our study.

### Acknowledgements

This work was supported by a grant from Ako Aotearoa [grant ID E2551] and by a grant from the Faculty of Humanities and Social Sciences, Victoria University of Wellington [grant ID 203776]. We acknowledge also the contribution of the instructors and students of the Wellington Institute of Technology, who allowed their classes to be recorded for this study. Our thanks also go to Dr Lisa Wood for her help in addressing statistical issues in the study.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## Funding

This work was supported by the Ako Aotearoa [ID E2551].

## Notes on contributors

**Jean Parkinson** is an associate professor in the School of Linguistics and Applied Language Studies at Victoria University of Wellington. She has published widely on science and technology discourse and language use in vocational education.

**Lauren Whitty** has a PhD in Applied Linguistics from Victoria University of Wellington, New Zealand. Lauren's research interests include corpus-based research, grammar, pedagogy and learner input/output. Lauren has taught English for academic purposes in the United States and New Zealand for the past eleven years and recognises the importance of research extending to the classroom.

## References

- Axelsson, K. 2011. "Tag Questions in Fiction Dialogue." PhD diss., University of Gothenburg.
- Barbieri, F. 2015. "Involvement in University Classroom Discourse: Register Variation and Interactivity." *Applied Linguistics* 36 (2): 151–173. doi:[10.1093/applin/amt030](https://doi.org/10.1093/applin/amt030).
- Barron, A., I. Pandarova, and K. Muderack. 2015. "Tag Questions across Irish English and British English: A Corpus Analysis of Form and Function." *Multilingua* 34 (4): 495–525. doi:[10.1515/multi-2014-0099](https://doi.org/10.1515/multi-2014-0099).
- Biber, D. 2006. *University Language. A Corpus Based Study of Spoken and Written Registers*. Amsterdam: John Benjamins.
- Biber, D., and E. Finegan. 1989. "Drift and the Evolution of English Style: A History of Three Genres." *Language* 65 (3): 487–517. doi:[10.2307/415220](https://doi.org/10.2307/415220).
- Biber, D., S. Johansson, G. Leech, S. Conrad, E. Finegan, and R. Quirk. 1999. *Longman Grammar of Spoken and Written English*. London: Longman.
- Cazden, C. 2001. *Classroom Discourse: The Language of Teaching and Learning*. Portsmouth, NH: Heinemann.
- Chen, Y., and A. W. He. 2001. "Dui Bu Dui as a Pragmatic Marker: Evidence from Chinese Classroom Discourse." *Journal of Pragmatics* 33 (9): 1441–1465. doi:[10.1016/S0378-2166\(00\)00084-9](https://doi.org/10.1016/S0378-2166(00)00084-9).
- Cobelas Cartagena, M. A., and G. Prego-Vázquez. 2019. "Participation Frameworks and Socio-discursive Competence in Young Children: The Role of Multimodal Strategies." *Discourse Studies* 21 (2): 135–158. doi:[10.1177/1461445618802656](https://doi.org/10.1177/1461445618802656).
- Csomay, E. 2002. "Variation in Academic Lectures: Interactivity and Level of Instruction." In *Using corpora to explore linguistic variation*, ed. R. Reppen, S. M. Fitzmaurice, and D. Biber 205–224. Amsterdam: John Benjamins Publishing.
- Csomay, E. 2006. "Academic Talk in American University Classrooms: Crossing the Boundaries of Oral-literate Discourse?" *Journal of English for Academic Purposes* 5 (2): 117–135. doi:[10.1016/j.jeap.2006.02.001](https://doi.org/10.1016/j.jeap.2006.02.001).
- Csomay, E. 2012. "A Corpus-based Look at Short Turns in University Classroom Interaction." *Corpus Linguistics and Linguistic Theory* 8 (1): 103–128. doi:[10.1515/cllt-2012-0005](https://doi.org/10.1515/cllt-2012-0005).
- Dalton-Puffer, C. 2007. *Discourse in Content and Language Integrated Learning (CLIL) Classrooms*. Amsterdam, The Netherlands: John Benjamins.

- Gardner, R. 2015. "Summons Turns: The Business of Securing a Turn in Busy Classrooms." In *International Perspectives on ELT Classroom Interaction*, edited by P. Seedhouse and C. Jenks, 28–48. London, England: Palgrave Macmillan.
- Garton, S. 2012. "Speaking Out of Turn? Taking the Initiative in Teacher-fronted Classroom Interaction." *Classroom Discourse* 3 (1): 29–45. doi:[10.1080/19463014.2012.666022](https://doi.org/10.1080/19463014.2012.666022).
- Goffman, E. 1981. *Forms of Talk*. Pennsylvania: University of Pennsylvania Press.
- Hepburn, A., and J. Potter. 2010. "Interrogating Tears: Some Uses of 'Tag Questions' in a Child Protection Helpline." In *'Why Do You Ask?': The Function of Questions in Institutional Discourse*, edited by A. F. Freed and S. Ehrlich, 69–86. Oxford: Oxford University Press.
- Heritage, J., and G. Raymond. 2005. "The Terms of Agreement: Indexing Epistemic Authority and Subordination in Assessment Sequences." *Social Psychology Quarterly* 68: 15–38. doi:[10.1177/019027250506800103](https://doi.org/10.1177/019027250506800103).
- Holmes, J. 1982. "The Functions of Tag Questions." *English Language Research Journal* 3: 40–65.
- Holmes, J. 1995. *Men, Women and Politeness*. White Plains: Routledge.
- Kimps, D. 2007. "Declarative Constant Polarity Tag Questions: A Data-driven Analysis of Their Form, Meaning and Attitudinal Uses." *Journal of Pragmatics* 39 (2): 270–291. doi:[10.1016/j.pragma.2006.08.003](https://doi.org/10.1016/j.pragma.2006.08.003).
- Kimps, D., K. Davidse, and B. Cornillie. 2014. "A Speech Function Analysis of Tag Questions in British English Spontaneous Dialogue." *Journal of Pragmatics* 66: 64–85. doi:[10.1016/j.pragma.2014.02.013](https://doi.org/10.1016/j.pragma.2014.02.013).
- Labov, W., and D. Fanshell. 1977. *Therapeutic Discourse: Psychotherapy as Conversation*. New York: Academic Press.
- Lee, Y. A. 2007. "Third Turn Position in Teacher Talk: Contingency and the Work of Teaching." *Journal of Pragmatics* 39 (6): 1204–1230. doi:[10.1016/j.pragma.2006.11.003](https://doi.org/10.1016/j.pragma.2006.11.003).
- Lindwall, O., G. Lymer, and C. Greiffenhagen. 2015. "The Sequential Analysis of Instruction." In *The Handbook of Classroom Discourse and Interaction*, edited by N. Markee, 142–157, Chichester, UK: John Wiley & Sons.
- Margutti, P., and P. Drew. 2014. "Positive Evaluation of Student Answers in Classroom Instruction." *Language and Education* 28 (5): 436–458. doi:[10.1080/09500782.2014.898650](https://doi.org/10.1080/09500782.2014.898650).
- McHoul, A. 1978. "The Organization of Turns at Formal Talk in the Classroom." *Language in Society* 7 (2): 183–213. doi:[10.1017/S0047404500005522](https://doi.org/10.1017/S0047404500005522).
- Mehan, H. 1979. "'What Time Is It, Denise?': Asking Known Information Questions in Classroom Discourse." *Theory into Practice* 18 (4): 285–294. doi:[10.1080/00405847909542846](https://doi.org/10.1080/00405847909542846).
- Mercer, N. 2007. "Sociocultural Discourse Analysis: Analysing Classroom Talk as a Social Mode of Thinking." *Journal of Applied Linguistics and Professional Practice* 1 (2): 137–168. doi:[10.1558/japl.v1.i2.137](https://doi.org/10.1558/japl.v1.i2.137).
- Michalovich, A., and H. Netz. 2018. "Tag-naxon? (Tag-right?) in Instructional Talk: Opening or Blocking Learning Opportunities." *Journal of Pragmatics* 137: 57–75. doi:[10.1016/j.pragma.2018.09.006](https://doi.org/10.1016/j.pragma.2018.09.006).
- Mohr, K. A. J. 1996. "Teacher Talk: An Analysis of Salient Features in the Classroom Discourse of Effective Teachers during Primary Literacy Lessons." PhD diss., East Texas State University.
- Othman, Z. 2010. "The Use of Okay, Right and Yeah in Academic Lectures by Native Speaker Lecturers: Their 'Anticipated' and 'Real' meanings." *Discourse Studies* 12 (5): 665–681. doi:[10.1177/1461445610376365](https://doi.org/10.1177/1461445610376365).
- Petitjean, C. 2014. "Social Representations of Turn-taking in Classrooms: From Compulsory to Post-compulsory Schooling in French-speaking Switzerland." *Classroom Discourse* 5 (2): 138–157. doi:[10.1080/19463014.2013.823350](https://doi.org/10.1080/19463014.2013.823350).
- Quirk, R., S. L. Greenbaum, G. G. Leech, and J. Svartvik. 1985. *A Comprehensive Grammar of the English Language*. London: Longman.
- Scott, M. 2012) *WordSmith Tools 6.0* [Lexical Analysis Software].
- Seedhouse, P. 2004. *The Interactional Architecture of the Language Classroom*. Oxford, England: Blackwell.
- Sinclair, J. M., and R. M. Coulthard. 1975. *Towards an Analysis of Discourse*. Oxford: Oxford University Press.
- Syler, C. 2016. "Actor Coaching: Talking Performance into Being." PhD diss., University of Pittsburgh.



Thwaite, A. 2014. "Teachers and Teacher Aides Initiating Five-year-olds into Science." *Functional Linguistics* 1 (6): 1–15. doi:[10.1186/2196-419X-1-6](https://doi.org/10.1186/2196-419X-1-6).

Tottie, G., and S. Hoffmann. 2006. "Tag Questions in British and American English." *Journal of English Linguistics* 34 (4): 283–311. doi:[10.1177/0075424206294369](https://doi.org/10.1177/0075424206294369).

Tottie, G., and S. Hoffmann. 2009. "Tag Questions in English: The First Century." *Journal of English Linguistics* 37 (2): 130–161. doi:[10.1177/0075424209332962](https://doi.org/10.1177/0075424209332962).

Waring, H. 2011. "Learner Initiatives and Learning Opportunities in the Language Classroom." *Classroom Discourse* 2 (2): 201–218. doi:[10.1080/19463014.2011.614053](https://doi.org/10.1080/19463014.2011.614053).

## Appendix

**Table A1.** Contribution of each instructor to the corpus.

Instructor	Total instructor words	Total TQ	TQ/10,000	% words contributed
Instructor A	17236	90	52.2	4.4
Instructor B	92925	362	39.0	23.5
Instructor C	25696	73	28.4	6.5
Instructor D	3623	7	19.3	0.9
Instructor E	16592	26	15.7	4.2
Instructor F	25067	43	17.2	6.4
Instructor G	14242	20	14.0	3.6
Instructor H	6268	8	12.8	1.6
Instructor I	28466	34	11.9	7.2
Instructor J	2943	4	13.6	0.7
Instructor K	45656	45	9.9	11.6
Instructor L	14347	15	10.5	3.6
Instructor M	8484	7	8.3	2.1
Instructor N	11407	6	5.3	2.9
Instructor O	12263	5	4.1	3.1
Instructor P	24020	7	2.9	6.1
Instructor Q	32242	3	0.9	8.2
Instructor R	1716	0	0.0	0.4
Instructor S	11479	0	0.0	2.9
	394671	755		