

The Pennsylvania State University

The Graduate School

**MANAGING PROGRESSIVITY IN SMALL GROUP DISCUSSIONS ON ZOOM**

A Dissertation in  
Applied Linguistics

by

Yingliang He

© 2023 Yingliang He

Submitted in Partial Fulfillment  
of the Requirements  
for the Degree of

Doctor of Philosophy

December 2023

The dissertation of Yingliang He was reviewed and approved by the following:

Joan Kelly Hall  
Professor Emerita of Applied Linguistics  
Dissertation Advisor  
Chair of Committee

Mari Haneda  
Professor of English as a Second Language, World Languages Education, and  
Applied Linguistics

Stephen Daniel Looney  
Teaching Professor in Applied Linguistics  
Director, International Teaching Assistant Program

Ning Yu  
Professor of Applied Linguistics and Asian Studies

Tommaso M. Milani  
George C. and Jane G. Greer Professor of Applied Linguistics, Jewish Studies,  
African Studies, and Women's, Gender, and Sexuality Studies  
Head, Department of Applied Linguistics

## ABSTRACT

Group discussions are frequently used in classrooms. Prior research has mainly focused on the efficacy of using group work and on designing tasks to better promote students' learning. Rarely investigated is the process accomplished by the students themselves. With the increasing popularity of teaching and learning online, it is important to investigate how students interactionally organize small group activities in a synchronous online environment; and how they forward the progression and work towards the completion of the activity.

This study uses conversation analysis and the concept of progressivity to investigate the above questions. The data include 20 hours of zoom recordings of small group discussions (3-5 students) in breakout rooms in two sections of an International Teaching Assistant training course. The analysis first reveals the working mechanism of student discussion and their strategies to progress interaction. A group discussion can be divided into several sections that are bookmarked by participants' reading the discussion questions out loud and are closed by a collective verbal/non-verbal agreement. This agreement either leads to a discussion on the next question or a breakdown in progression. Secondly, analysis show students' practices to maintain or regain progressivity: assigning agency to the discussion questions, verbally selecting a next speaker, and "what else / any other ..." interrogatives are found to be frequently used by the participants to hold other speakers in the group accountable to speak and in turn progress the discussion. Thirdly, it is found that epistemic imbalance among group members creates a temporary halt in progression in interaction, which is resolved by a negotiation of epistemic relations among the students.

The results of this study advance insights in the field of CA on how the overarching goal of an institutional interactional project affects progressivity. In addition, this study reveals how

interactants with similar rights progress conversations in institutional settings. Pedagogically, by showing the working mechanism of group discussion in classrooms, the results can provide guidance for teachers when designing group work and for teacher educators when illustrating group work as a classroom activity to pre-service teachers. They can also give insights to in-service teachers on how to mediate students verbally and textually on teaching materials to better facilitate the progression of group work.

## TABLE OF CONTENTS

LIST OF FIGURES .....	vii
LIST OF TABLES .....	viii
TRANSCRIPTION CONVENTIONS.....	ix
ACKNOWLEDGEMENT .....	x
Chapter 1 Introduction .....	1
Background and Study Aim.....	1
Group work in higher education .....	1
Online Group Work and New Challenges .....	3
Context of study and Method.....	8
Organization of the dissertation .....	10
Chapter 2 Literature Review .....	12
Group Work in Face-to-face Context.....	14
Online Teaching and Learning.....	17
Overview of Online education .....	17
Group Work in Synchronous Mode .....	20
Conversation Analysis and Progressivity .....	23
What Halts Progressivity and How to Resolve.....	28
Summary .....	32
Chapter 3 Methodology .....	34
Research Site and Participants .....	34
Data Collection .....	36
Data Source.....	36
Data Safety and Trustworthiness .....	38
Analytical Framework .....	39
Basic concepts of CA.....	42
Data Transcription .....	49
Analytical Procedure.....	51
Summary .....	58
Chapter 4 Interactional Organization of Small Group Discussion .....	60
Opening discussion sequences .....	61
Use of Orienting Practices .....	61
Order of the prompts guides discussion.....	66
Absence of orienting practice .....	68
Returning from a side or an insert sequence .....	70
Closing and Transitioning to a next sequence .....	73
Closing thirds cause dissatisfaction and disengagement.....	80

Summary .....	83
Chapter 5 Breaking the Silence Post-lapse Practice to Regain Progressivity.....	85
Lapse: the vulnerable position .....	85
Solution: Mobilizing response .....	89
Solution 1: Speaker selection and tilted epistemics .....	90
Solution 2: "any other"/"what else" interrogative .....	95
Deviant Case .....	99
Summary .....	101
Chapter 6 Epistemics and Progressivity .....	103
Epistemic imbalance between a more knowledgeable and a less knowledgeable member .....	103
All members are not knowledgeable.....	109
Practice 1: Passing over the information-seeking question.....	109
Practice 2: Negotiation of epistemic relation.....	112
Practice 3: Borrowing institutional authority.....	118
All members are knowledgeable.....	122
Summary .....	127
Chapter 7 Discussion and Implications.....	129
Summary of the findings.....	129
Implications.....	131
Online synchronous small group discussion as a distinct form of institutional talk .....	131
Mobilizing Responses .....	134
Progressivity and Epistemics .....	135
Online interaction and Screenshare.....	136
Limitations .....	137
Pedagogical Recommendations .....	141
Clearer Prompts .....	141
Assigning Specific Roles .....	143
Summary .....	144
References .....	146

## LIST OF FIGURES

Figure 1: Data view with screenshare off .....	37
Figure 2: Data view with screenshare on .....	38
Figure 3: Annotated video data .....	53
Figure 4: MEN's facial expression .....	81
Figure 5: MUS puts on headphone .....	82
Figure 6: Video Interface .....	87
Figure 7: Group layout .....	100
Figure 8: Teacher-cam and Student-cam (Looney & He, 2021) .....	138
Figure 9: ESOL Lab School <a href="http://www.labschool.pdx.edu/">http://www.labschool.pdx.edu/</a> .....	138

**LIST OF TABLES**

Table 1: Participants' information .....	36
Table 2: Adapted Jefferson (2004) transcription conventions .....	49



## TRANSCRIPTION CONVENTIONS

Adapted from Jefferson (2004)

<b>Verbal Utterance</b>	
*ABC:	header for speaker with camera on
#ABD:	header for speaker with camera off
=	Contiguous utterances (latching).
ab↑ cde L abcde	Overlapping utterances
(.)	Micro-pause (0.2 seconds or shorter).
(1.3)	The number inside the parentheses represents the length of the pause.
>word<	Surrounds talk that is spoken faster.
<word>	Surrounds talk that is spoken slower.
°word°	Soft speech.
*word*	Surrounds talk that is said in a creaky voice.
WORD	Loud speech.
<u>word</u>	Stress/accenuation.
:	Elongation of a syllable. Each : represents 0.2 seconds.
-	Abrupt stop in articulation. Cut-off.
↑	Marked upshift in pitch.
↓	Marked downshift in pitch.
,	Slight rise in pitch at the end of an utterance. Continuing intonation.
?	Rising in pitch at utterance end.
.	Fall in pitch at the end of an utterance.
(word)	Uncertain utterances. Surrounds the best guess.
xxx	Unintelligible syllables.
&haha	Laughter; indicate laughter particles after symbol
☺	Smile voice.
☹word☹	Breathy voice
<b>Nonverbal Conducts</b>	
*abc:	header for nonverbal conduct performer
<i>(italics)</i>	Description of nonverbal conduct
<i>LH / RH</i>	Left hand or right hand
(1.3)/(LH)	Description of nonverbal conduct and how long it lasts
↑&haha L( <i>LH waves</i> )	Nonverbal conduct overlaps with verbal utterance

## ACKNOWLEDGEMENT

I first would like to express my deepest gratitude to my advisor, Joan Kelly Hall, for her unwavering support, invaluable guidance, and continuous encouragement throughout the entire process of completing this dissertation and my Ph.D. Her expertise, insightful feedback, and dedication have been instrumental in shaping the direction and quality of this research. I am truly grateful for her mentorship and the opportunities she has provided me.

I am also indebted to the members of my dissertation committee for their invaluable contributions and feedback. Their expertise, constructive criticism, and insightful suggestions have significantly enhanced the quality and rigor of this study. I am sincerely grateful for their time, effort, and commitment to ensuring the successful completion of this dissertation.

I then would like to extend my heartfelt appreciation to Tianfang Sally Wang for her unconditional love and constant support throughout this process. Her encouragement, patience, intellect, and belief in my abilities have been a strong source of motivation and inspiration. We are a stronger force when together.

Last but not least, I want to express my deepest gratitude to my parents for their endless love, encouragement, and belief in me. Everything I have and who I am today, I owe it to you. Too unfortunate that my father cannot see me graduate, but I shall forever hold him in my heart.

## **Chapter 1 Introduction**

This chapter provides an overview of the study. First, the background of the study, the research questions, and the significance and implications of the findings are introduced. The context of the study and the research methodology follow. The chapter then ends with the organization of this dissertation.

### **Background and Study Aim**

#### **Group work in higher education**

In U.S. higher education classrooms, group work is omnipresent. It takes different forms, some of which require students' hands-on activities such as doing experiments in science labs, while others require more verbal contributions such as small group discussions. Both require students to collaboratively contribute their individual share of work towards collective activity goals (Blatchford et al., 2003). Group work has been shown to be effective in different learning contexts, such as language learning (e.g., Long & Norris, 2004), science learning (see Bennett et al., 2010 for a comprehensive review), medical training (e.g., Roels et al., 2021), writing courses (e.g., Asterhan et al., 2011; Asterhan & Schwarz, 2009), and therapy training (e.g., Aldrich & Johansson, 2015).

Studies have been conducted to investigate the appropriate methods for organizing and executing group work to promote effective learning. With regard to teachers, scholars have explored the manner in which they should supervise and assess the performance of students during group activities (Cooper, 1990; Davis, 1993; Freeman & Greenacre, 2011; Johnson et al., 1991). Other studies have investigated factors that might affect the outcome of group work, such as the ideal number of individuals in a group (Csernica et al., 2002; Davis, 1993), the composition of group members (i.e., how they are assigned to work together as a group; Cooper, 1990; Felder & Brent, 2001), and the influence of cross-cultural factors (Kimmel & Volet, 2012).

Compared to teacher-fronted pedagogy, group work puts students in the center of learning as they actively participate, affording them a level of agency in their learning (Bentley & Watts, 1992). It is found that as students share their thinking, understanding, opinions, and reasonings with each other, they learn more quickly and more effectively (Arends, 1997; Hiebert & Wearne, 1993). Studies have documented improvements in students' learning and understanding of class content, critical thinking, problem-solving, and communication skills when implementing group work in class (e.g., Bender, 2003; Ellis et al., 2004; Gall & Gall, 1990; Garside 1996; Lyon & Lagowski, 2008; McCarthy & Anderson, 2000; Panitz, 1999).

The pedagogy associated with small group work is referred to as (1) problem-based learning (PBL) in medical training originally and later adapted in a variety of fields such as law, education, social studies; and (2) task-based learning (TBL) in second language acquisition specifically. Both posit that when engaging students to work together towards a real-life and challenging problem/task, learning happens in the process (Bruffee, 1999; Johnson & Johnson, 2009; Slavin, 1996; Van den Branden et al., 2009).

To pinpoint what exactly promotes effective learning in group work, the majority of PBL and TBL research focuses on the design of the problem/task itself. Tasks are defined to be “what gives meaning to the learners' explorations. Only a well-designed task can ensure the quality of the learning process” (Furstenberg, 1997, p.24). Studies have shown that challenging issues and dilemmas designed in tasks can promote conceptual thinking (Hung et al., 2008), and that different tasks in the problem-solving process, such as collaborative writing, brainstorming, and researching promote learning as well (Alaimo et al., 2009). Studies also investigate how tasks are designed to promote learner interaction and push learners to practice learnables accordingly (Samuda & Bygate 2008; Skehan 2003).

However, it is simply not sufficient to only investigate the task/problem itself without examining what kind of learner interaction and engagement occurs during the task. First and foremost, how and about what students interact has an impact on the outcome of the activity (Asterhan & Schwarz, 2007, 2011; Webb & Palincsar, 1996). It has been found that students' divergent orientations to the activity goal can negatively impact the progression and the outcome of the task (Hellermann & Doehler, 2010). The

lack of institutional authority among students in a group also impacts the outcome of the activity (Hall & Bulter, 2017). How students collectively organize a task and how an activity is progressed when the teacher is not present is still largely unexplored.

Additional evidence shows that what unfolds during a task in group discussion may be markedly different from what the task itself anticipates (Kasper, 2004; Mondada & Pekarek Doehler, 2004; Mori, 2002; Ohta, 2000). After all, interaction is highly contingent and the direction and content of the interaction are not always predictable (Sacks et al., 1974). Studies have shown that even though the requirements of a task can dictate what counts as on-topic and off-topic in a discussion, topic management and legitimatization of topics are locally decided by the participants (Gan et al., 2008; Markee, 2005; Stokoe, 2000). It is the group members who decide what to talk about and how to move through the task. And therefore, their learning outcomes may differ significantly.

In short, group work is found to require a finely-designed task in order to maximize the learning outcome. There has been abundant research focusing on and providing guidance on how to better design tasks for group work (Alaimo et al., 2009; Bruffee, 1999; Johnson & Johnson, 2009; Klein, 1999; Samuda & Bygate 2008; Skehan 2003; Slavin, 1996; Van den Branden et al., 2009; Woods, 1985). However, fewer studies investigate what students, the actual participants of the group work, do to accomplish group work in detail, which may be different from what the task requires. It is therefore important to investigate and understand how students interactionally organize their group work, how they maintain a collective orientation, and how they maintain a forward progression of the discussion in order to complete the task. In other words, how are interactions organized by the students to reach the task's expectations?

### **Online Group Work and New Challenges**

Against the backdrop of the global pandemic, many face-to-face classes have been transformed to online courses. Online education has long existed, though mainly in the form of distance and asynchronous web learning. Asynchronous web learning is defined as “an open distributed dynamic learning environment allowing instructors and learners to interact with well-designed web-based technology in order to share and reuse course materials at any time from any place” (Torun, 2013, p.

2493). In other words, course content resides in course management systems on the web which learners have access to through their computers. Teachers and learners can also interact with each other by leaving comments and messages on the course system. It extends access to education to a wider population and allows students at different physical locations to learn together.

Compared to asynchronous web learning, synchronous online learning relies on text chat or audio/video communication software and gathers learners from different physical spaces together in an online virtual space; users communicate with each other in real-time. It aims to mimic a learning environment similar to face-to-face (F2F) learning. The synchronous nature affords more possibilities for learner communication and participation (Hudson et al., 2012), the formation of a learning community (Scott et al., 2009), and decreases miscommunication and misunderstanding among the learners (Strang, 2013).

The majority of research on synchronous group work focuses on textual communication, such as using programs like WhatsApp or chatroom-based textual communication (Beeghly, 2005; Jepson, 2005; Larson & Keiper, 2002; Rinekso & Muslim, 2020). It has been shown that synchronous group work through textual communication entails stronger and more productive collaboration, compared to the asynchronous method, and that it can be similarly effective compared to F2F group work (Strang, 2013; Mayer et al., 2017).

Studies on synchronous group work using video conferencing, however, are scarce. Existing studies rely on student surveys, probing students' perceptions of the use of breakout rooms in online synchronous videoconferencing group work (Jung & Brady, 2020; Roels et al., 2021). Results report learners' positive reception, expressing that breakout room group work shares a level of resemblance to ones in F2F contexts (Jung & Brady, 2020). Other studies shed light on how the design of videoconferencing software allows, affords, and limits the interaction in group work (Hampel & Stickler, 2012; Örnberg Berglund, 2009), and the use of Zoom breakout room specifically (Brown et al., 2016; González-Lloret, 2020; Kohnke & Moorhouse, 2020).

To date, no study has examined the detailed unfolding of synchronous online group work and how group tasks are interactionally accomplished. Specifically, three aspects of online group work warrant further research. Firstly, it is crucial to explore the unfolding of group work from the perspectives of students, who are the actual participants in these activities. The findings can deepen the understanding of the working mechanism of group work and the process of how tasks are accomplished in the synchronous online context. Knowing these provides teachers and teacher educators with a better understanding of group work.

Secondly, there is a need to examine how interaction unfolds in the context of synchronous online environments within educational settings. This is especially significant because online interaction operates in a distinct manner compared to face-to-face interaction. Research on synchronous videoconferencing examining video calls using programs such as Facetime and Skype has shown that video calls present a fractured ecology where interactants lose their access to a large number of non-verbal resources such as gazing at others, orienting their bodies to things/people, and manipulating some object that is publicly available to all the interactants (Halvorsen 2016; Hjulstad, 2016), which contribute significantly communicating meanings, and to understanding actions performed by others in F2F environments (Goodwin & Goodwin, 2012). Interactants, therefore, are less capable of producing recognizable actions with nonverbal conduct because their interlocutors only have very limited visual access to the “local” environment. In the educational context, different classes utilizing various videoconferencing programs add one more layer of communicative modalities, such as chat boxes, emojis, camera filters, and various modalities they generally do not have in F2F interaction. Understanding how group work is accomplished in this new context brings further insights into online communication in classrooms.

Third, group work is a unique form of institutional talk; investigating the unfolding of student group work furthers the understanding of specialized interaction in conversation analysis. There have been plenty of studies investigating teacher-student interaction in terms of how the interaction is organized such as turn-taking organization (Houser, 2009; Kaanta, 2010; Mortensen, 2008; Mehan, 1979; Seedhouse, 2004; Waring, 2013) and more specifically how question and answer sequences are organized, namely IRE (Mehan, 1979; Markee 2000; Nassaji & Wells, 2000; Sinclair & Coulthard, 1975). It is clear that teacher-student interaction embodies an unequal speech exchange system where the teacher controls, directs, and structures the conversation (Markee, 2005). They are entitled to do so because it is institutionally sanctioned (Heritage, 2004). In comparison, understanding student group work poses challenges: 1) the sequential organization is largely unknown; 2) the range of ways that speech exchange can take place varies greatly based on the members' dynamics (Kunitz, 2018; Markee, 2005; Seedhouse, 2008), especially when there is no teacher control. Without the presence of a teacher, all the students in the group have the same level of power and responsibility to control the direction of the talk (Mercer, 1996). The uniqueness of this form of student talk deserves research attention. This study aims to investigate the following questions:

1. how do students interactionally organize small group activities in a synchronous online environment?
2. how do they forward the progression and work towards the completion of the activity, through what resources?
3. how do students resolve trouble or conflicts when the progression of the activity is stopped?

Knowing how synchronous group work is accomplished has strong implications for the research on group work in an online format. The findings contribute to understanding the



intersection of task design – the activity goal – and learners’ orientation to the progression and completion of the activity in the moment.

Second, the findings contribute to the understanding of the relationship between progressivity and institutional and epistemic power in CA research. The current CA research sheds much light on how participants orient to progressivity and activity goals. When interactional trouble occurs, the person with more institutional power or with more knowledge pushes the interaction forward. Findings from examining interactions among equally institutionally and epistemically powered students can enhance the understanding of progressivity in the field of CA.

Third, pedagogically, the findings provide insights for teachers and teacher educators on a deeper understanding of the working mechanism of multiparty group work. Little has been done to understand how group work is carried out by students – the real participants – in classrooms. It is, thus, paramount for teachers and teacher educators to understand more thoroughly what happens during a group work activity, its overarching structure, and what students do to progress the activity. The results of this study can potentially provide guidance and rationales for teachers when assigning group work; for teacher educators when explaining group work to pre-service teachers. In addition, using CA, the findings make visible what students orient to when encountering a task. Therefore, the findings can give insights to in-service teachers on how to provide mediation verbally and on worksheets to better facilitate the progression of group work.

Finally, the identified linguistic and paralinguistic practices students used to progress an activity could be used as teaching materials for novice L2 learners or learner who are not familiar

with small group work as a pedagogical activity. They can be informed of the resources available to actively participate.

### **Context of study and Method**

The data were collected in an International Teaching Assistant (ITA) preparation course held on Zoom at a university in Pennsylvania, U.S. ITAs are graduate students whose first language is not English and who intend to work as teaching assistants to instruct and hold office hours in English. The preparation course aims to equip students with the necessary English oral skills to communicate academically and professionally with their prospective students. Group work is commonly used as a pedagogical activity in this course at different phases of a class. Students' group interactions were recorded in two sections of the ITA course; the instructors' teaching was not recorded. This amounted to 20 hours of Zoom Breakout room videos. The participants' faces (if their camera was on) and their screenshare activities were captured.

To understand how group work is accomplished, Conversation Analysis (CA) will be used to investigate how students organize the interaction from their perspective. CA is the study of the sociological underpinnings of social life as constructed in interaction. It stems from the theoretical thinking of Ethnomethodology (EM) which studies social activities from a radically emic perspective. That is, EM views social order and structure as locally co-constructed and accomplished (Garfinkel, 1964), which is produced and re-produced cooperatively in the moment through observable, recognizable, accountable social actions (Heritage, 1984). How humans, as competent social members, "navigate the social world" (Heritage, 1984, p. 230), the member's methods of how social activities are accomplished and recognized is what EM aims to reveal.

CA adopts the same view on how the social world and actors within operate, that is, social structures are constructed and reconstructed by the social action. CA then puts its focus on social interaction specifically and aims to reveal the organization of interaction. It posits that the “primordial site of human sociality” lies in conversation (Schegloff, 2006, p. 70). The premise of CA is that interaction is ordered and is the locus of social order (Sacks, 1984). CA focuses on the participants’ perspective, not the analysts’ and it shows “the perspective from within the sequential environment in which the social actions are performed” (Seedhouse, 2005, p. 535), which is the same as EM. In addition, CA focuses on how social activities are talked into being, e.g., do being a teacher or a student. That is, interactants make use of the interactional resources available in the interactional infrastructure to accomplish social actions in accordance with their role in the context.

A primary goal of CA is to uncover the orderliness and sequential organization of interaction and to identify the constituting social actions and practices. In order to do so, CA uses video-audio recorded data, and detailed transcription of the data showing the sequential unfolding of interaction, what is said and done, and how (e.g., prosodic features). When investigating interaction, it is not only the verbal utterances that CA takes into account but the nonverbal practices (e.g., gaze, head nods, hand movements, interaction with the environment and objects such as pointing, touching, and moving objects) that contribute to making actions recognizable.

Specifically, the concept of progressivity in CA will be used to investigate the research questions. Progressivity is defined as moving to the upcoming next (Schegloff, 2007), be it a sound, a word, a turn, or a sequence, without interference. In interaction, mundane or institutional, there is a general preference for progression, i.e., interactants work towards the

completion of something, as small as finishing pronouncing a word, a sentence, answering a question, to completing an objective or accomplishment of some action. In conversation analysis, this preference is termed preference for progressivity and it is one key aspect of conversation infrastructure (Schegloff, 1979).

It has been found that participants constantly orient to progressivity unless intersubjectivity is jeopardized (Heritage, 2007; Kuroshima, 2010) or participants do not display their presumed epistemic status (Leydon et al., 2013). There is a strong link between participants' orientation to progressivity and their adherence to the institutional goal (Fogarty et al., 2013). Participants are found to depart from canonical sequential structures and mobilize different practices to progress the interactional sequences (e.g., Fox & Heinemann, 2019; Lee, 2011; Muntigl, 2013; Stivers & Robinson, 2006) in order to achieve the interactional goal.

In short, the concept of progressivity sheds light on the interactional mechanism, i.e., sequential organization and interactional practices, of how interactants push forward a conversation, and how interactants' orientation to the task goal can affect the progression of an activity. This makes the concept apt for investigating learners' interactional practices when managing to work towards the completion of group work where there is an explicit goal. CA, with its focus on uncovering the interactional structure of conversation, its focus on participants' interactional practices and actions, and its focus on both the verbal production and the non-verbal practices, is apt to address the research questions raised.

### **Organization of the dissertation**

Chapter 2 provides a literature review on three topics: 1) a review of the current work in group work in higher education; and 2) teaching, learning, and student group work in online

video conferencing environment, and 3) an overview of the sociological approach CA, its research investigating the concept of progressivity, including its definition, its relation to activity goal, what halts progressivity, and how participants treat halts in progressivity. Chapter 3 describes the research sites and participants, data collection procedures, and analytical procedures including theoretical framework, data transcription, definitions of key terms, and selection of excerpts. Chapters 4 to 6 present findings from a more macro-level description of interaction to micro-level progressivity. Chapter 4 presents the structural sequential organization of group discussion across sequences, demonstrating how students' orientation to the goal and the artifact of discussion questions affect macro-level progressivity. Chapter 5 shows how progressivity is managed when long lapses are treated as problematic and a halt in progression, highlighting students' practices to mobilize other member's response in order to maintain a forward progression. Chapter 6 shows in the smaller core sequences where students focus on one discussion question, how progressivity is managed when a halt occurs with a special focus on epistemic imbalance. The dissertation ends with a conclusion and implication for teaching in Chapter 7.

## Chapter 2 Literature Review

This study aims to investigate the following questions:

1. How do students interactionally organize small group activities in a synchronous online environment?
2. How do students ensure the forward progression of the activity, through what linguistic and nonverbal resources?
3. How do students resolve trouble or conflicts when the progression of the activity is stopped?

To answer the three research questions, research on group work in face-to-face context will first be reviewed. Findings have shown group work to be an effective form of student-centered activity centered around meaningful tasks (e.g., Bender, 2003; Ellis et al., 2004; Gall & Gall, 1990; Garside 1996; Lyon & Lagowski, 2008; McCarthy & Anderson, 2000; Panitz, 1999). Students are reported to show better learning outcomes (Alaimo et al., 2009). Studies also have shown that although task designs influence how students perform, they do not dictate. Students show different orientations to the meaningfulness of the tasks, resulting in a schism between student performance and teacher expectations (Kasper, 2004; Mondada & Pekarek Doehler, 2004; Mori, 2002; Ohta, 2000). Remaining unexamined is how students interactionally organize their interaction to match the goal of the activities, and how they work towards the completion of the tasks.

A review of research on teaching and learning in the online environment will follow. The review will first show an overview of the two main modes of instruction delivery in online education (OE) – asynchronous mode and synchronous mode. While asynchronous mode offers wider access to course content and flexibility in the pacing of learning, students need to be more

self-motivated and disciplined. Synchronous mode, on the other hand, using audio and video conferencing programs, allows real-time interaction, which to some level mimics face-to-face teaching and learning.

Research on group work in synchronous online teaching and learning contexts is still rather limited. However, existing studies have focused on different aspects, including task design, benefits of textual and audio/video communication, effectiveness compared to face-to-face settings, students' opinions, and the content of group work. Some studies suggest that synchronous online group work can be as effective as face-to-face group work, while others report mixed results.

A review of the current research on how interactants organize their conversations follows. CA conceptualizes progressivity as participants' orientation to the forward progression in interaction. Participants constantly orient themselves towards progressivity in interaction, whether through verbal or nonverbal actions (Schegloff, 2007; Stivers, 2001; Stivers & Robinson, 2006). Orientation to progressivity was also found in interactants' seemingly misaligning turns when they try to close the sequence faster in order to accomplish the activity goal.

Finally, four main factors that create a halt in progression are identified in the literature. Intersubjectivity, which can temporarily halt progressivity when not maintained (Heritage, 2007; Kuroshima, 2010). Epistemic incongruence is another factor that can halt progressivity when a person's displayed or claimed knowledge does not match their presumed status (Leydon et al., 2013; Balaman & Sert, 2017). In such cases, interaction can be pushed forward through the person with more epistemic rights or access. In addition, silence in interaction may be treated as a halt in progression as there is no upcoming-next being produced (Heoy, 2015; 2017; 2018; Vatanen, 2020).

### **Group Work in Face-to-face Context**

The efficacy of group work as a means of learning in the classroom context has been a focus of a great deal of research over the last two decades. In general, findings show that group work allows active participation among peers, co-construction of sound reasoning and knowledge, which eventually lead to cognitive gains and higher level learning (Amato & Amato, 2005; Barron, 2003; van Boxtel, van der Linden, & Kanselaar, 2000). Having synthesized 122 studies and 486 study findings in total, Lou et al. (2001) concluded that students who participated in group work gained significantly higher academic achievements and task performance. With a set number of materials, students also learn more and retain what was learned longer if taking part in group work compared to other students who were presented with materials in other pedagogical means (Barkley et al., Cross & Major, 2005; Davis, 1993). Graduate students, when doing a collaborative task using wikis as platforms, were reported to apply knowledge more effectively (Elgort et al., 2008).

Additional research has examined the links between various components of group work and learning (Bruffee, 1999; Johnson & Johnson, 2009; Slavin, 1996; Van den Branden et al., 2009; Woods, 1985), with findings showing the following. First, group work organized around structured, meaningful tasks leads to more effective learning than group work that is not (Roseth et al., 2008; Slavin, 2015). Such tasks have no right answer; they encourage meaningful communication, such as the sharing information and knowledge, and entail active problem solving involving skills such as critical thinking and brainstorming (Cohen, 1994; Clements & Sarama, 2003; Shachar & Sharan, 1994; Stephen & Plowman, 2003; Yelland, 2006). In addition, these tasks are clearly defined, challenging, learner centered (Hung, 2009; Schmidt & Moust,



2000; Sockalingam & Schmidt, 2011; van Berkel & Schmidt, 2000), authentic and real-world (Hung, 2006; Innes, 2006; Loyens et al., 2008; Schmidt et al., 2009; Wirkala & Kuhn, 2011).

Although research so far has built a strong link between task design and learning outcome, additional findings reveal that students do not necessarily act based on the task design. In other words, the actual unfolding task has been found to be different from what the task anticipates. This distinction is termed as *task as workplan* and *task as activity* (Breen, 1987; Coughlan & Duff, 1994). When students co-construct an activity together, the activities are re-constructed, negotiated or even transformed locally in real-time (i.e., task as activity) and oftentimes are different from the teacher's intended plan (i.e., task as workplan). This is in line with Garfinkel's (1996) distinction between *instruction* and *instructed action* when understanding how social actors navigate the social world. Instructions refer to guidance participants receive from the social world be it explicit formal rules and guidelines, implicit and subtle cues. In contrast, instructed actions are the observable behaviors that participants do in response to the instructions, which is a reflection of how individuals make sense of the instructions they receive. Social order is produced when individuals receive instructions and produce instructed actions; and they might be tremendously different from each other.

In classrooms, the reason of the schism between task as workplan and task as activity is attributed to students' different orientations to the learning objectives and different understandings towards the same task (Hellermann, 2007). To be specific, it is found that students still roughly follow what the task asks them to do, but they orient to various aspects of the same task. For example, Kunitz and Skogmyr Marian (2017) showed that learners oriented to spelling accuracy as their top priority, rather than complete what the group work task required – making a poster. Students held each other accountable and worked together collaboratively on

the spelling accuracy, which ensured the progressivity of the local activity but not the main task. In another study, during an activity that required students to practice sentence structures, some students were found to focus on word search and vocabulary review (Mori & Hasegawa, 2009). Mori (2002) reported a more extreme case where the format of the activity was changed completely. The task is for students to have natural conversations with invited native speaker guests while it was found that students were organizing a structured interview.

What students do and how they do it, are organized and structured locally by the participants themselves by collaboratively achieving an orientation and understanding of the task. Students adjust their understanding of the task in the moment. Stokoe (2000) shows that participants calibrate their orientation towards the task, displaying their understanding of what counts as on-task or off-task through re-orientation sequences. For example, students used, “anyway, we’re drifting, maybe we should get back to the subject” to steer away from the off-topic discussions. In a peer-to-peer group oral assessment activity, students, by verbally referring to the task agenda, constantly monitored the topic relevance and group orientation to the task is calibrated (Gan et al., 2009). Non-verbally, students are found to use eye gaze or head orientation towards the communal object or the potential or the current speaker as a way to reach mutual orientation (Kunitz & Skogmyr Marian, 2017; Mori, 2002; Mori & Hasegawa, 2009; see also in non-groupwork setting, Ford, 2008; Markaki & Mondada, 2012).

In short, research has demonstrated that group work facilitates active participation among peers, co-construction of reasoning and knowledge, and ultimately leads to cognitive gains and higher-level learning. Students who participate in group work achieve significantly higher academic achievements and task performance, and they also learn more and retain what was learned longer compared to other pedagogical means. Structured, meaningful tasks are more

effective for learning than unstructured ones. However, research has shown that the actual unfolding task may differ from the intended task plan due to different orientations and understandings of the same task among students. Students co-construct and negotiate their local activities in real-time, which may deviate from the teacher's intended plan. Therefore, more research is needed to fully understand how the activity of group discussion is interactionally organized and progressed. Moreover, in whole class instruction, the teacher is responsible for organizing the interaction, allocating turns, transitioning to various activities, with institutional power vested in them (Markee, 2000; Markee & Kasper, 2004; McHoul, 1978). In group work, however, all the students have relatively equal rights with relatively equal epistemic and deontic power. It is less clear how the activity is organized without an institutional authority figure.

## **Online Teaching and Learning**

### **Overview of Online education**

While face-to-face interaction has been the dominant delivery method in education, online education (OE) has increased over the last twenty years, mostly in higher education institutions (for detailed reviews, see Carrillo & Flores, 2020; Sun & Chen, 2016). Online education is typically categorized into two delivery types – asynchronous mode and synchronous mode. Asynchronous mode relies on the course management platform. Teachers and students use the platform to store and access course content, submit assignments, and participate in discussions. It is asynchronous as students can choose to interact with the course at their own pace. In contrast, synchronous OE uses video or audio conferencing computer programs to allow real-time interaction between teachers and students or among students. The pace of interaction is similar to a face-to-face classroom.

The most prevalent delivery method in OE is asynchronous. Studies of this mode reveal several of its advantages: it lifts the constraints of time and space, which expands educational access and curricular choices to a wider population (Ahern, 2008; Barbour & Reeves, 2009; Berge & Clark, 2005; Cavanaugh & Blomeyer, 2007); it gives more time for students to think and increases their confidence (Beeghly, 2005; Yamada, 2009), and it increases participation by student who usually are too shy to speak up in class (Northey et al., 2015; Warschauer et al., 1996).

Research also identified the following drawbacks for asynchronous method: there is heavy reliance on written responses making interactions susceptible to miscommunication due to lack of modalities of tone, facial expressions and gestures (Ruday, 2011); it is less engaging and makes it difficult to connect with others and develop a sense of belonging and learner community (Ahern, 2008; Graham, 2006; Hu & Hui, 2012); and it requires students to be more self-disciplined and motivated without teachers' real-time monitoring (Allen & Seaman, 2007). Studies comparing courses taught face-to-face versus asynchronously found that students perceived asynchronous online language courses more negatively than those in other subjects mainly due to lack of speaking and real interaction with peers (Oliver et al., 2012; Yamada, 2009).

In contrast, findings of studies of OE delivered synchronically show that OE, although more engaging than asynchronous OE, is generally perceived by students as less effective compared to FTF teaching. Students feel more supported and connected to the teacher and to each other, as reactions from interactants are visible and immediate (Lee, 2021).

Despite its attempts to mimic F2F teaching and learning, synchronous delivery mode is still largely different from traditional physical classrooms. In classes using video/audio

conferencing software, teaching and learning is not only mediated by the teachers and peers, but also technology (Kohnke & Moorhouse, 2020). As these programs add several new modalities to the interaction, they expand the way interaction is carried out in the classroom. For example, the added modalities include but not limited to text chat, file exchange, shared screen, videos, mouse movement, emoji, vote/raise hand buttons (McBrien et al. 2009; Hampel & Stickler, 2012; Jepson, 2005).

Videoconferencing tools also limit the interaction in online classrooms. Features of synchronous classroom using online video conferencing include: frequent lengthy pause (Aldrich & Johansson, 2015), short student responses (Aldrich & Johansson, 2015; Moorhouse, 2020), difficulty managing turn taking (Payne, 2020). In addition, it is found that the number and frequency of student verbal contribution are strongly influenced by teaching style and task design (Cheung, 2023; Stickler et al 2007); and student turn-taking is controlled and organized by the teacher compared to FTF classroom (Örnberg Berglund, 2009).

Findings show that it is difficult to encourage student participation in synchronous OE (Hauck, 2007; Hauck & Youngs, 2008). For example, Hampel and Stickler (2012) investigated the use of FlashMeeting as a teaching delivery program. FlashMeeting only allows one person to talk at a time; others who want to talk need to join a queue and be broadcasted later. They show that the program allows a constrained turn-taking system with no opportunities for recipient backchanneling (e.g., uh huh, mm hm) or interruption (Hampel & Stickler, 2012). In another study examining discussion and reflection sessions among medical students (Braak et al., 2021), it is found that even when there is an open-mic policy where everyone is unmuted, there is no guarantee that everyone has the same level of right to enter the conversational floor.

## **Group Work in Synchronous Mode**

Research on group work in the synchronous online teaching and learning context is rather limited. Four main strands of research are present. First, similar to research on FTF group work, studies investigate how task designs can affect learning. Specifically, in the field of computer mediated learning, studies focus on how to design group tasks to encourage student interaction, student collaboration and participation (Stickler & Hampel, 2010; Hauck, 2012; Lee, 2016). Findings show that tasks were specifically designed to fit the learning goal and technological medium (Hampel, 2006; Hampel & Hauck, 2006; Kurek & Müller-Hartmann; 2017). For example, Lee (2016) has shown that structured tasks can improve individual learning, open-ended task encourage student exploration and social interaction, while teacher mediated tasks impact student effort spent on the tasks. In another study, Wiki collaborative editing and reflective blogs were used to promote student communicative learning and focus-on-form in language learning contexts (Stickler & Hampel, 2010)

Second, studies have investigated the benefits of using textual communications during group work in synchronous online contexts. Chatrooms were beneficial for task negotiation and planning, exchange of opinions, and practice of language learning (Blake, 2000; Darhower, 2002; Fernández-García & Martínez-Arbelaiz, 2002; ; Lee, 2001, 2002; Smith, 2003a, b; Rinekso & Muslim, 2020). Others found that in Google Doc group collaboration, the quality of the end-product mostly relies on individual work rather than a group effort (Chen & Wu, 2011), which implies the ill-fitness for using Google Doc as a tool to encourage collaboration. Finally, Asterhan et al. (2012) sheds light on the influence of teacher guidance in group work using textual communication and found that teacher guidance can positively affect the quality of students responses but does not increase their participation and discussion.

Fewer studies have examined the use of synchronous online group work using audio/video conferencing programs (Jepson, 2015; Mayer et al., 2017; Strang, 2013). Most studies focus on the effectiveness of group work, investigating the final results of the tasks required when synchronous video conferencing and other modalities are used. In general, findings are mixed. In some cases, the effectiveness of group work accomplished through synchronous online method was at least as good as that accomplished in face-to-face setting. For example, Strang (2013) compared two groups of students in a graduate level project management class, with one using asynchronous discussion forum and the other with access to synchronized electronic whiteboard, video, and audio communication. Group tasks include business information system analysis and design as well as some programming tasks. Students who are proficient with different skillsets are grouped together in order to promote collaboration within the group. Results show that the synchronous group received a significantly higher project score (72.13 vs. 65.29) than the asynchronous group. The reason for the higher performance in the synchronous group is attributed to the richer communication in different modalities and the instant feedback. Mayer et al. (2017) compared the synchronous delivery method against the traditional FTF instruction in one section of a college-level mathematics courses in an advance high school. The main activity under investigation is the recitation. The synchronous online group had access to conferencing programs with synchronous audio/video channels and electronic whiteboard. The two groups showed no statistical difference in their final scores. The experiment group reported increased involvement, satisfaction, and social cohesion despite the occasion technical difficulty. In a language learning classroom, between a group with text chat and the other with voice chat in a large private online English language school, Jepson (2005)

found that more repair moves were made in the voice chat group which may be more beneficial for language learning to happen.

Other studies aimed to understand students' opinions on synchronous group work using surveys and interviews. Results show that students find high level of resemblance between Zoom breakout rooms and FTF interaction (Jung & Brady, 2020), and prefer four to five people in a group (Roels et al., 2021).

Lastly, a few studies specifically examine what students do and talk about in synchronous online group work. Analysis mainly focuses on the content, i.e., the *what* but not *how*, and use a variety of data sources. Veen and de la Croix (2017) focus on the topics and themes that tutors and resident doctors orient to when conducting reflection sessions. Other studies also shed light on the themes of interaction students conduct during group work, including social interaction, negotiation of tasks, and off-task conversation, using thematic analysis (Hampel & Stickler, 2012; Scott et al., 2009). To understand the learning environment students build together, Paulus (2005) conducted functional move analysis on transcripts of emails, synchronous chat, and asynchronous discussion forum messages as data source. It was found that only 39% of the interaction was conceptual talk which addresses the conceptual understanding of the content, while 61% focused on logistics, social talk, and technical issues.

In short, four main strands of research are identified, with the first focusing on how task designs can affect learning outcomes. Findings from this research suggest that structured tasks can improve individual learning, while open-ended tasks encourage student exploration and social interaction. The second strand investigates the benefits of using textual communication during group work, with chatrooms found to be beneficial for task negotiation, exchange of opinions, and language learning practice. The third strand examines the effectiveness of group



work accomplished through synchronous video conferencing, with findings indicating mixed results. Finally, a few studies focus on understanding what students do and talk about during synchronous online group work, with themes of social interaction, task negotiation, and off-task conversation identified.

Similar to prior research on group work in face-to-face context, there has been much research on the task design, what students talk about, but little is known about *how* the activity is accomplished. Furthermore, research on synchronous online group work is scarce. Especially during the age when many classes are held using synchronous video conferencing program. Even less is known about how group work is conducted and organized in this context by the students, with the affordances and limitations by technology. There is, therefore, a need to gain a deeper understanding of the unfolding of the task accomplished by the students.

### **Conversation Analysis and Progressivity**

To understand how students organize an activity *in situ*, in other words, the *how* and the *process*, CA is an apt theoretical framework for its micro-lens on social actions and constituting practices. CA is an interdisciplinary field of study that focuses on the analysis of talk in natural settings. It is a sociological approach to understanding the structure and organization of conversations, with a focus on how participants interact with one another. It also draws on insights from linguistics and anthropology. CA is based on the premise that talk is not just a tool for conveying information but also a means for achieving social action. CA is interested in the ways in which social actors use talk to create and maintain social structures and norms.

What CA studies differs from psychological constructs in that it focuses on the language use rather than individual psychological processes. While psychological approaches to language often emphasize the cognitive processes involved in understanding and producing language, CA

focuses on how social actions are accomplished through verbal and non-verbal display. For example, interactant's understanding of the subject being discussed is revealed through their verbal production of *change-of-state* token (Heritage, 1984).

Specifically in group work, to make sense of how students accomplish participating in group work, studies analyze the observable and reportable actions and practices during the process. What are understood as mental states or abstract concepts, such as learning, cognition, understanding, motivation, are operationalized and embodied into concrete practices (turn-taking, repair, body movement, etc.) and sequential organization of talk (Hellerman & Doehler, 2010; Kasper, 2009).

Skogmyr Marian & Kunitz (2017) summarize students' display of participation through CA lens as follows:

participants display to each other their practical reasoning (Lindwall & Lymer, 2005) and *their epistemic stances, statuses, and responsibilities* (Heritage 2013; Stivers, Mondada, & Steensig, 2011) in order to investigate how the participants, through talk and *embodied actions* (gestures, eye gaze patterns, artifact use etc.), establish an *observable local educational order* (Hester & Francis, 2000). (emphasis added, p. 52)

Participation in group work is made visible through careful and detailed description of non-verbal conduct. For example, students' active participation and willingness to participate were made visible through their head turn, body torque, and gaze at the group's communal artifact and at the current and anticipated next speaker, and their active next turn self-selection or use of pre-beginning (Schegloff, 2006) by anticipating the possible turn transitional place (TRP) (Evnitskyay & Berger, 2017; Lee, 2017; Skogmyr Marian & Kunitz, 2017)

In regard to understand how students organize and accomplish group work, I use the concept of progressivity. Progressivity is about the *upcoming next*, be it a sound, a word, a turn, or a sequence (Schegloff, 2007). It shows participants' orientation towards a forward progression, the completion of an interaction project. As a key aspect of conversation infrastructure, it penetrates all levels of interaction, within a turn, between turns, and between sequences. To understand progressivity further, I discuss the concept in relation to adjacency pairs, preference organization and alignment.

Adjacency pair is constituted of a pair of turns, usually adjacent to each other – a first-pair-part (FPP) and a second-pair-part (SPP) – produced by two different speakers, and are pair related and conditionally relevant (Schegloff, 2007). That is, an FPP accomplishing a certain action makes an SPP, another action conditionally relevant (e.g., a compliment and an acknowledge or expressing gratitude). Preference refers to the normative expectation about the upcoming conditionally relevant SPP on a structural and affective level, also referred to as alignment and affiliation. “Isn’t the weather beautiful” structurally prefers a positive response, such as “yes” or “yeah”. On an affectively, a positive response also matches the initiation question’s presumed affect. Therefore, adjacency pairs and alignment is an embodiment of progressivity. Providing an aligning SPP moves the interaction forward and is preferred.

Progressivity not only concerns “a hearably-next-one”, but also a “visible-next-one”. That is nonverbal conduct alone can constitute a turn, and therefore, has the capability of progressing a sequence. For example, following “can you pass me the water” is a nonverbal action of passing the water suffices as the SPP and qualifies progressivity.

It has been found that interactants constantly orient to progressivity in interaction. Goodwin and Goodwin (1986) show that when one is displaying trouble producing a particular word or

searching for a word, the interlocutor tends to produce a candidate for the word search aiming to progress the turn. In a triad interaction among a doctor, a child, and their parents, Stivers (2001) and Stivers and Robinson (2006) show that when children were selected as the next speaker by the doctors, the parents would take the turn and answer for the children if turn transitional place (TRP) was reached and the children did not provide an answer. The parents overrode the current-speaker-select-next rule but showed their orientation to the progressivity of conversation.

Progressivity introduced thus far is often associated with canonical interactional structure, e.g., the adjacency pairs, the preliminary sequences, a mechanism that conversation unfolding follows, a desired state that participants work towards. Recent studies show that participants' orientation to progressivity is also visible through their breaching of canonical structures where participants provide misaligning responses (Fox & Heinemann, 2019; Lee, 2011).

Fox and Heinemann (2019) coined the term *telescoping responses* to describe a practice that carves out a shortcut for conversational progressivity. In their study of interactions in a shoe repair shop, they found that when customers showed trouble describing the problem with their shoes or elaborating what their requests were, cobblers, instead of attempting to complete customers' turns (as mentioned before, when one speaker shows indications of speech perturbations or hesitation, it is often perceived by the interlocutor as an invitation to contribute, i.e., other completion; Goodwin & Goodwin, 1986; Chevalier & Clift, 2008), skipped ahead and directly provided a proposed solution. Structurally, the response does not align with the customer's turn design. However, the telescoping response not only implicitly completes the unfinished, un-verbalized request but also grants it. This feature of skipping the stage of other-completion exemplifies telescoping. This practice, therefore, accelerates the sequence and

exemplifies participants' orientation to progressivity. Lee (2011) reveals a similar finding in airline ticket booking conversations in Korea. When being asked for their names, customers, instead of providing a type-conforming answer (i.e., their names), provided their civil registration numbers or airline membership numbers. They fast-track the conversation by providing a unique way of identification and avoiding further questions on identity. Structurally, these answers do not align with the questions, but do show how their orientation to the activity goal affects progressivity.

On an even more macro level of interaction beyond a sequence, Fogarty, Augoustinos, and Kettler (2013) showed that participants may strategically withhold the progressivity of a sequence in pursuit of the progressivity of a larger activity. Exemplified with conversations between an interviewer and a sexually abused child, they show that when the child displays resistance to answer, indicated by sound stretch, hesitation, recycling ambiguous words without adding details, the interviewer would abandon the current sequence and start a new one in which they asked the child to make a drawing. The interview later was expanded and deepened by making use of the drawing. Sequentially, the unfolding of the original sequence met resistance and the progressivity was suspended; but from an interactional project perspective, the progressivity was forwarded towards the larger activity goal.

From the above studies, progressivity operates on two levels. First, it represents a structural unfolding of interaction, accomplished through an unhindered production of speech, of a preferred responsive action, and of preferred sequence. Second, it represents participants' orientation to a higher overarching activity goal, which may affect the first-level progressivity. The concept of progressivity is, therefore, a proper concept to understand students' organization

of group activity for its focus on all levels of interaction, and its focus on participants' orientation to the activity goal.

### **What Halts Progressivity and How to Resolve**

Not many studies in classroom interaction sheds light on how progressivity is accomplished in educational contexts. In this section, I review studies in mundane and other institutional contexts and show the influences factors that can affect progressivity and how trouble can be resolved.

#### ***Intersubjectivity***

Research has identified situations when progressivity is temporarily put on hold. As mentioned before, the upcoming-next either reaffirms what has been produced so far or signals that a reconfiguration of understanding is needed. Therefore, when intersubjectivity is not maintained, progressivity is halted. Intersubjectivity is prioritized over progressivity. For example, through examining interactants' usages of person and place references (e.g., when referring to a person, one can use "s/he", only first name, full name, a nickname, "that man/woman", and so on), Heritage (2007) shows when no trouble of recognition of a person/place reference is present, speakers will simply choose to progress the sequence. On the contrary, if the recipient shows trouble recognizing the referent, extra turns are produced to ensure recognition. In this way, intersubjectivity is prioritized over progressivity. Kuroshima (2010) presents a similar finding in restaurant ordering sequences. A prototypical unfolding ordering sequence goes as such: customer ordering, server repeating order, customer confirming. It is found that if the second position turn in this sequence – server repeating order – is done in a falling intonation which commonly signals confirmation, there will be generally no sequence expansion and sometimes the third position turn will be omitted. In this case, the second turn

progresses the sequence or even closes one. On the contrary, if the repeating order action is done in a rising tone which might be taken by the recipient, i.e., the customer, as a repair initiation or seeking confirmation, the generic three-part sequence is expanded to four, adding server confirming again in the fourth position. The closing of the sequence is in consequence delayed. The finding, therefore, demonstrates participants' orientation to progressivity unless intersubjectivity is at risk. And when progressivity is halted due to an intersubjectivity issue, a repair sequence is launched.

### ***Epistemic Incongruence***

Aside from intersubjectivity being the influencing factor stopping progressivity, epistemics also plays role in progressivity in interaction. Epistemics has to do with the modality of knowledge in interaction. Epistemic status and stance are used to describe two aspects of a person's knowledge: epistemic status refers to a person's access to a specific domain of knowledge, which is stable and presumed; epistemic stance refers to the display or claim of how much knowledge in a certain domain a person has in interaction, which can be changing moment by moment, and indexed through syntax, prosodic feature, facial expressions (Heritage, 2012). When a person's displayed or claimed stance does not match with the presumed status, there is *epistemic incongruence*.

It was found that epistemic incongruence cause a halt in progressivity (Leydon et al., 2013; Balaman & Sert, 2017). In a triage communication system where cancer patients (or their relatives/spouses) called a helpline for consultation, the calls got picked up first by frontline staff collecting patients' personal information and description of symptoms, and then were transferred to professional nurses, Leydon et al. (2013) show that progressivity is temporarily on hold when the nurses show epistemic incongruence. Especially, before the patients and the nurses were

connected, the frontline staff would report the patients' information (personal and symptoms) to the nurses in order to get them prepared for the telephone consultation. Hence, the nurses, being informed by the frontline staff, held a share of the epistemic responsibility of knowing who the patients were and what they were experiencing. When the nurses failed to verbalize their understanding of the patients' current status and essential information, they were held accountable by the patients and the progressivity of the conversation was temporarily halted. The conversation cannot be progressed further until the nurses display knowledge of the patients.

When epistemic issues halt the progressivity of interaction, interaction can be pushed forward through the person with more epistemic rights or access. Roberts (2022) presents a case where a mother tutors her child homework; the homework is in Swedish but the mother does not have advanced Swedish proficiency. When they encountered language issues during tutoring, the father, whose first language is Swedish, was mobilized to progress the sequence. In this study, the mother is deemed as the manager of the activity while the father takes the role of a language expert who has epistemic primacy in the Swedish language domain. The mobilization of the father's expertise helps the mother and the child progress through the tutoring activity as a whole.

In classroom group work, it is also found that the participant with the more knowledgeable stance tends to push forward the activity (Skogmyr Marian & Kunitz, 2017). Jakonen and Morton (2015) examined how epistemic relations during group work are negotiated and affect the progressivity of the activity in a Content and Language Integrated Learning (CLIL) history classroom in an EFL secondary school in Finland. The focus of the analysis is the epistemic search sequence where one member of the group displays a K- stance requesting information from the other members. 1) information is provided by a K+ member; 2) nobody in



the group displays or claims a K+ stance; 3) information is provided but is later contended by the information requester. In the first case, the search sequence will simply close, while in the second case, a sequence expansion is usually involved. Different resources can be mobilized for the K- member to further pursue an answer, such as referring back to the textbook, a self-initiated repair to clarify, initiating another search sequence targeting at other people who are not in the current group. In the third case, it becomes rather complex. In order to contend the answer provided by the K+ member, the K- member has to upgrade his/her stance, thus entering the competition (who is right). One party has to downgrade the stance so that one candidate answer can be accepted.

### *Silence*

Silences in interaction may be treated as a halt in progression as there is no upcoming-next being produced. Silences can be categorized into three types: pause, gap, and lapse (Schegloff, 2007). A period of silence within a turn is a pause; one between turns is a gap; and one between sequences is a lapse.

A pause and a gap can be attributed to a particular speaker. A pause may indicate the speaker's trouble producing a word/sound and hinders progressivity. In this case, other-completed word search can progress the turn (Goodwin & Goodwin, 1986). A gap indicates the absence of an SPP, which signals a halt in progression. In this case, response mobilization is used (Stivers & Rossano, 2010). Four resources are identified that can mobilize the recipient's response: interrogative morphosyntax, interrogative prosody, speaker gaze, recipient-tilted epistemic asymmetry (the recipient has more knowledge access to the talkable).

When everyone in interaction chooses to “forgo their turn to speak” (Hoey, 2015, p.430), the silence is a lapse. The action prior to the lapse is treated as completing the requested action

and therefore closing it (Schegloff, 2007). However, since participants may have different orientations to whether a sequence is completed or not, certain silence may be treated as a lapse by one participant and a gap by another, and therefore causes a halt in progression.

When a lapse occurs, it has been found that participants do the following actions: 1) end the interaction; 2) treat it as a legitimate closing and move on to other engagements; or 3) treat the lapse as problematic (Hoey, 2015; 2017; 2018; Vatanen, 2020). In the first scenario, re-completion of a sequence is identified as a common practice to ensure collective orientation to the activity closing. The sequential structure is as follows: FPP – SPP – closing – lapse – re-completion. Common resources to accomplish reclosing include: acknowledgment (mm, yeah, okay), assessment (that’s good, it’s good), affective vocalizations (laughter, sigh, deep exhalation), and other (so... idunno). In the second scenario, participants use embodied resources to indicate their engagement with other activities, and with the interlocutors, they collectively transition to another activity. In the third scenario, the lapse is treated as problematic. This, in everyday interaction, in fact happens rather quickly. Jefferson (1989) suggests that in everyday English interaction, 1 second is the maximum allowable silence while Hoey (2017) suggests an even shorter 0.5 second. Silence longer than 0.5-1 second may be treated by the participants as conspicuous absence of talk” (Hoey, 2015, p. 442). Research so far does not specify the practices to restore progressivity after lapses.

### **Summary**

Prior research has established the positive impact of group work on student learning outcomes within the classroom. Furthermore, there is strong evidence supporting the connection between task design for group work and student learning. Despite this, it has been found that

students' actual performance in group work may not always align with the anticipated outcomes. Additionally, limited knowledge exists regarding how group work is organized without the presence of epistemic or institutional authority.

In online education specifically, there has been extensive research on the design of tasks and topics discussed in the classes with majority of research focusing on asynchronous classes, but little attention has been given to how these activities are carried out in real-time online. Moreover, there is a lack of research on synchronous online group work, particularly in the current era where video conferencing is widely used in classes. There is a limited understanding of how students organize and conduct group work in this context, taking into account the capabilities and limitations of the technology. As a result, there is a pressing need to gain a more comprehensive understanding of how students carry out tasks in these settings.

In this study, conversation analysis and its core concept progressivity is used to investigate the following questions:

1. How do students interactionally organize small group activities in a synchronous online environment?
2. How do students ensure the forward progression of the activity, through what linguistic and nonverbal resources?
3. How do students resolve trouble or conflicts when the progression of the activity is stopped?

The next chapter documents the research site, participants, and data collection methods for this study. The theoretical framework of CA and its key concepts are then discussed. Last but not least, the analytical methods are shown with examples illustrating the procedure taken to answer the research questions.

## **Chapter 3 Methodology**

This chapter addresses the methods and procedures that were followed in this study. The research site, participants, and data collection method are first detailed, followed by an introduction of the analytical framework, Conversation Analysis, definitions of its key terms, and the transcription process. Next, the analytic procedures used to interrogate the data are discussed, including how the excerpts were chosen to answer the research questions.

### **Research Site and Participants**

The data collected for this study comprised 20 hours of video-recordings taken from two sections of a level three ESL course at a research university in Pennsylvania from October to December 2020. The course is part of a three-course program at the university designed for prospective international teaching assistants (ITAs) who are speakers of English as a Second/Other Language. Pennsylvania state law mandates that all ITAs take an English communicative proficiency test, which measures their competence to teach and communicate in English. Based on their test scores, test takers are either exempt from the program or placed in one of three courses. The course under investigation is the highest level among the three and focuses on three themes: effective use of English as a communicative tool, effective teaching in different pedagogical contexts, and cultural traits in American academia. At the end of this course, students are required to take an exit exam, passing which will grant them the clearance to teach or hold office hours. Pedagogical content includes teaching techniques and strategies, classroom interaction analysis, linguistic pragmatics, and English pronunciation. Participation frameworks vary, with some activities being delivered as plenary instruction, while others are designed for students to work in pairs or small groups.

The full description of the course is as follows<sup>1</sup>:

“Advanced course in American Oral English for preparation of international teaching assistants. ESL-ITA-130 American Oral English for ITAs III (3) This course is designed to provide English language instructional support for advanced non-native speakers of English who need to improve their communication effectiveness in order to become teaching assistants. Through various language related activities, students will increase the intelligibility of their speech by improving their pronunciation of American English. To do this, they will develop an acute awareness of their own strengths and weaknesses as a communicator in real and simulated instructional contexts. They will also develop effective oral communication strategies necessary for interaction with individual students, small groups, and large classes. Students will learn about American cultural traits and underlying assumptions as they pertain to communication in the university-level classroom. By the end of this course, students will have improved their overall communication effectiveness to carry out their future teaching assistants responsibilities successfully.”

During the time of data collection, all courses were conducted online due to the global pandemic, using Zoom, a synchronous online video-conferencing software program. The majority of classes were delivered in the main meeting room, with the teacher using the screen-sharing function. This feature allows other users to see the screen-sharer’s entire desktop or a particular window while having control over their screen (“Sharing your screen,” 2022). Small group activities were carried out in breakout rooms, which refer to sessions that are separated from the main Zoom meetings, allowing participants to gather in smaller groups with isolated

---

<sup>1</sup> The exact source is not shown for keeping the anonymity of the university and participants

audio and video. Breakout rooms are used for the purpose of collaboration and discussion ("Managing breakout room," 2023).

The data were collected from two sections, taught by two different instructors: Instructor 1 – Hermione, with nine participating students, and Instructor 2 – Toby, with five participating students. Both instructors were graduate teaching assistants in the department offering the ESL-ITA courses during the time data were collected and assumed full teaching responsibilities, including preparing all lessons, teaching, grading, and holding office hours. Of the 14 participating ITAs, 12 are Mandarin speakers, 1 is a Spanish speaker, and 1 is a Korean speaker. Their pseudonyms are listed below in Table 1, and in the later analysis, abbreviated pseudonyms will be used.

Table 1: Participants' information

	Pseudonym	Abbreviated pseudonym	First Language	Instructor
1	Mengyuan	MEN	Mandarin	Hermione
2	Bolang	BOL	Mandarin	
3	Jiecun	JIE	Mandarin	
4	Liangci	LIA	Mandarin	
5	Motian	MOT	Mandarin	
6	Wuyang	WUY	Mandarin	
7	Songxi	SON	Mandarin	
8	Musi	MUS	Mandarin	
9	Yeli	YEL	Mandarin	
10	Ava	AVA	Spanish	Toby
11	Lenglan	LEN	Mandarin	
12	Chun-Lin	CHU	Mandarin	
13	Hyejin	HYE	Korean	
14	Lanxin	LAN	Mandarin	

## Data Collection

### Data Source

Prior to each class session between October and December 2020, the instructors informed the researcher whether there would be a group discussion and whether the sessions were suitable

for data collection. During each session, the researcher was first informed about the number of students per group for the activity of the day and was given the authority on Zoom to place consented students into the breakout rooms. Only the group discussions of these participating students were recorded, not the entire class session. For Hermione's class, 2-3 breakout rooms were recorded per class session, depending on the attendance of consented students, while for Toby's class, only 1 breakout room was recorded per class session.

Due to technical limitations, each Zoom breakout room required one Zoom account for video recording purposes. Three Zoom accounts were created, and each breakout session was recorded and saved locally on separate computers for both classes. When screenshare was not in use, participants were kept in grid view to ensure that all students could be seen (see Figure 1). Grid view refers to each participant's camera view is displayed and arranged in a grid format. When screenshare was employed, the participants' camera views are put in the upper right corner and the recording mainly captures their screenshare (see Figure 2). Most participants kept their cameras on throughout the breakout sessions. As the researcher and video recorder, the researcher kept the camera off during the entire data collection process.



Figure 1: Data view with screenshare off

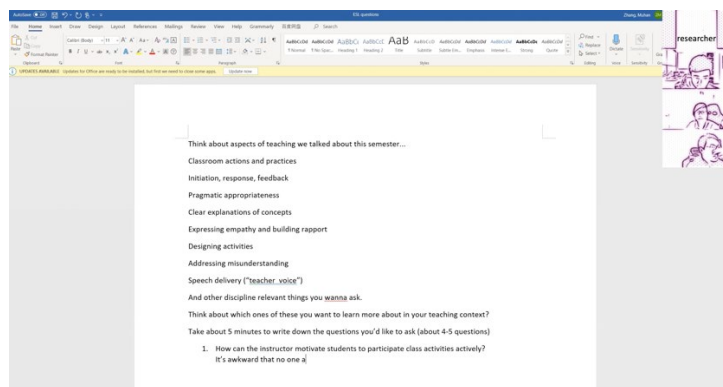


Figure 2: Data view with screenshare on

Ideally, to render a more complete and stronger analysis, participants' screens and their surrounding areas need to be recorded as well. However, in consideration of reducing the invasiveness of the study, these data were not collected. Field notes were taken to document the context surrounding the activities in which the students participated, including the lesson's focus, requirements, directions, and goals for the discussions. Additionally, PowerPoint slides for all classes were collected as supporting materials.

### Data Safety and Trustworthiness

To ensure the confidentiality of the participants, all data were recorded, and saved on a secure university server. The original data on the computers' hard disks were deleted. All the screengrabs in this study, which are still images clipped from the recorded videos, are displayed with an added sketch filter to minimize identifiability. All the participants and the research site are pseudonymized.

The presence of a researcher and video recording device(s) can affect participants' behavior and interaction, leading to anxiety or unnatural and censored interaction (Blaxter et al., 1996; Crosby et al., 2008; Lapadat, 2000; Laidlaw et al., 2011). However, others argue that participants view the camera or research as part of the interaction and an element of the local



context, and thus, analysts must take the researcher or video recorder's presence into account when analyzing the interaction (Speer & Hutchby, 2003).

Collecting data on Zoom poses new challenges for researchers, including poor internet connection, poor audio/video quality, and unfamiliarity with computer software (Deakin & Wakefield, 2014; Weller, 2015). However, a study examining the use of Zoom as a data collection tool reports positive feedback from participants, citing easy access and time- and cost-effectiveness as the main advantages of Zoom used as a collection tool (Archibald et al., 2019). Nonetheless, to date, no identified studies discuss the impact of researchers' presence on participants' performance in synchronous video conferencing data collection.

To minimize the negative impact of the researcher's presence in the Zoom breakout rooms, participants were informed that the goal was solely to record their interaction, not monitor or evaluate their performance. Moreover, they were informed that the researcher would not be listening to their discussion in real-time to minimize their presence during the discussion; data would only be examined after the data collection ended.

### **Analytical Framework**

The present study is founded on Conversation Analysis (CA), which is grounded in an ethnomethodological perspective of the social world (Garfinkel, 1988, 1996; Heritage, 1984). Ethnomethodology (EM), established by Harold Garfinkel, is a radical response to conventional sociological formal analysis that posits a fixed social structure in which human beings operate. Garfinkel, influenced by Schutz (1964), contests this notion and emphasizes that we, as social actors, make sense of our everyday world through common-sense social constructs. In doing so, we function as proficient members of society, comprehend and interpret others' motives and

intentions, or as Heritage (1984) puts it - "navigate the social world" (p. 230). It is through our actions in the social world that we shape it, rather than formal structures shaping our behavior.

Garfinkel rejects the notion of a top-down approach to comprehend the social world and its structure. Instead, he emphasizes focusing on what is being done and how it is being done in the moment of social activities. Hence, social structures are achieved cooperatively online rather than pre-existing. Heritage (1984) summarizes EM as "the study of properties of practical common-sense reasoning in mundane situations of action...[it] in favour of studying how the participants create, assemble, produce, and reproduce the social structures to which they orient" (p. 231). Thus, social activities are co-constructed by the participants through observable, recognizable, and accountable social actions (Heritage, 1984), providing an analytical foundation for EM researchers. The findings of EM studies are descriptive and pedagogical, opening a window for individuals not familiarized with a particular context to comprehend what "actors" are doing and how they perceive others' actions from their own perspectives.

Conversation Analysis (CA) is deeply rooted in Sociology and more specifically, Ethnomethodology. Both highlight the participants' own orientation and understanding of the social world and that the social structure are co-constructed by the social actors themselves. By describing the practices interactants use to accomplish a variety of social actions, CA explicates on the structures of human interaction. Similar to Ethnomethodology (EM), CA is radically emic. Emic and etic are two opposing perspectives for understanding and logical reasoning. The etic approach relies on external and pre-established systems to understand phenomena, whereas the emic approach studies phenomena from within, and discoveries, categories, and systems are formulated in the moment. Pike (1967) noted that emic views "represent to us the view of one familiar with the system and who knows how to function within it himself" (p. 38). CA's emic

perspective presents us with how the interactants themselves function and navigate *in situ*. In other words, CA analysts present the participants' own understanding of what is unfolding. To do so, CA uses the next turn proof procedure, which means that any claim the analyst makes is grounded in the interlocutors' subsequent orientation to the prior action. For example, if A says, "water is boiling," and B responds, "thanks" while running out of the room to the kitchen and starting to make tea. A claim can be made by the analyst that the descriptive statement about the state of the water made by A in a declarative format is doing information and giving a request for action, which can be sustained by B's subsequent responsive action.

A fundamental premise of CA is that interaction is "the primordial site of human sociality" (Schegloff, 2006, p. 70). It posits that human interaction is ordered and is the locus of social order (Sacks, 1984). The order is produced moment by moment and repeated again and again in different interactions by competent social members (Psathas, 1995). The overarching goal of CA is then to uncover the patterns, orders, and structures of interaction, how they are sequentially accomplished, and through what practices, and in so doing, it unveils "the social organization underlying the production and intelligibility of ordinary, everyday social actions and activities" (Heath & Luff, 1993, p. 306).

"Why that now?" summarizes the essence of CA's research focus. That is, CA investigates what action a turn accomplishes and what its ensuing consequences are. Using the above example, what action was A doing other than describing? Why would B express gratitude to A's mere description of an objective fact? By investigating the social actions participants accomplish and the practices that constitute each action, CA analysts are able to explicate and make visible the social structure through turn-by-turn, moment-by-moment examination of social actions. Each turn is contingent upon the prior turn, and participants interpret what action is

being carried out in real-time. Social activity/interaction is, hence, co-constructed and collectively oriented to by the participants. The goal is to explain the interactional infrastructure and also to “uncover the social competences which underlie social interaction, that is, the procedures and expectations through which interaction is produced and understood” (Heritage, 1984, p. 258).

Conversation Analysis “is arguably the most quantitative of the qualitative social science methods” (Stivers, 2015, p. 3). It is quantitative in the sense that CA categorizes interactional phenomena by investigating their constituting practices. It is a bottom-up method and patterns emerge after examining and coding sets of data. To render more convincing arguments, the frequency and distribution of certain types of language and interactional features need to be provided. It is also a qualitative study because practices accomplish a variety of social actions depending on their sequential positions, contexts, modes of interaction, and so forth. In other words, each interactional phenomenon under investigation deserves detailed analysis before giving it a code.

To provide further insight into the theoretical foundations of CA, I will begin by introducing the fundamental concepts in CA and utilizing them to introduce the four organizations that form the basis of the interactional infrastructure.

### **Basic concepts of CA**

*Turn, turn construction unit (TCU), and social action.* A turn can be defined as a vessel through which social actions are accomplished, while TCUs refer to the linguistic or nonverbal resources that constitute a turn (Drew, 2012). These resources can include sounds, words, phrases, clauses, in-breaths, laughter, hand gestures, body movement, facial expressions, and more. The resources are designed to accomplish social action(s) and are made available (hearable

and visible) for the recipient to interpret (Levinson, 2013; Schegloff, 2007). For example, during a dinner party, when A asks B to pass the salt, the action that A is trying to accomplish is to request an item. TCUs of requests can possibly take the form of a clausal interrogative such as "Can you pass me the salt?", a phrasal directive like "Salt please," or a nonverbal conduct like a head-tilt towards the salt and then towards B.

*Adjacency pairs and conditional relevance.* Adjacency pairs refer to a pair of turns, often adjacent to each other, in which the first turn makes the second turn conditionally relevant. The first turn is known as the first pair part (FPP) and the second turn is called the second pair part (SPP). Conditional relevance implies that the action accomplished by the FPP expects one or a range of corresponding actional SPPs (Schegloff, 1968). For instance, a greeting expects a reciprocal greeting, and a request for information expects the receipt of requested information or a rejection.

To further explain the theoretical groundings of CA, the following four main types of organizations that are fundamental to the interactional infrastructure and to understanding interaction from a conversation analytic perspective (Heritage, 1984; Sacks, 1992, 1995; Schegloff, 2007) will be introduced, using the basic concepts previously mentioned: sequence organization, preference organization, repair organization, and action formation.

*Sequence organization.* Sequence organization refers to the relative positioning of turns. According to CA, the positioning of an action is fundamental to understanding its meaning and significance (Schegloff, 2007; Stivers, 2012, p. 191). Actions are accomplished through turns, and the positioning of the turns is consequential to understanding the actions being performed. More broadly, actions are enacted in a coherent, orderly, meaningful succession, i.e., sequences of actions, through which social activities are accomplished (Schegloff, 2007, p. 2).

The aforementioned adjacency pair is the most basic unit of sequence organization. Turns at different sequential positions can do different actions. See Excerpt 3.1 for an example in which the word “tastes” accomplish various actions by the teacher and a student named MAD.

Excerpt 3.1 tastes as different actions (CEAPP, 2014)

656 MAD: but americans aren't always so sensitive, (0.3) to  
 657 to foreign tas- (0.3) u:h tasis and habits.  
 658 (0.3)  
 659 TEA: TASTES.  
 660 MAD: tastes?=  
 661 TEA: =tastes.

The student MAD is reading a sentence in the textbook but is not able to pronounce the word “taste” correctly (lines 656-657). After a short silence, the teacher provides correction by pronouncing the word “tastes” in a loud volume and falling intonation (line 659). MAD, then, makes an attempt of the correct pronunciation, produced with rising intonation (line 660). The teacher confirms MAD’s attempt by repeating the word with falling intonation (line 661). In this excerpt, the word “tastes” produced at three different sequential positions accomplish three different actions with different prosodic features.

Beyond the scope of adjacency pairs, sequences also follow a specific order. For instance, a sequence of checking availability usually precedes an invitation sequence to increase the likelihood of the invitation being accepted. Sequences are constructed to elicit preferred responses, which will be further discussed in the preference organization section.

*Turn-taking organization.* One of the fundamental principles of Conversation Analysis (CA) is the idea that interaction is orderly (Schegloff, 2000), and this can be observed through how participants take turns to speak. Turn-taking refers to the "orderly distribution of opportunities to participate in social interaction" (Schegloff, 2000, p. 1). The organization of

turn-taking has two main components: turn construction and turn allocation techniques (Schegloff, 2007). First, turn construction relates to the design of turns and how participants determine when to take a turn. As a speaker approaches the end of their turn construction unit (TCU), the possibility of a turn transition becomes relevant, and the end of each TCU where turn-taking is possible is referred to as turn transitional places (TRP). Second, turn allocation techniques relate to how the next speaker is determined (Sacks et al., 1974). Two types of procedures are involved: next-speaker-self-select and current-speaker-selects-next. When a TRP is (almost) reached, a possible next speaker can take the turn and speak. In a two-party interaction, current-speaker-selects-next is often accomplished without mentioning the other interlocutor's name, using means such as questioning, eye gaze, and gestures (Streeck, 2009; Tiittula, 1985). In a multiparty interaction, current-speaker-selects-next is often achieved through the nomination of the next speaker (i.e., saying the person's name) or eye gaze (Goodwin, 1981; Lerner, 1993, 2003; Streeck, 1995).

*Repair Organization.* Repair is a mechanism that participants use to address difficulties with speaking or hearing and to ensure that the conversation is mutually understood (Schegloff, 1992). Intersubjectivity refers to the shared understanding of the actions that turns are accomplishing. Common difficulties with speaking or hearing include misspeaking, mishearing or misunderstanding a word or phrase, and not understanding what action the prior turn accomplishes. Repair practices are used to resolve such difficulties and restore intersubjectivity.

*Preference organization.* Preference refers to the normative expectation about the upcoming conditionally relevant turn on a structural and social level. It does not have anything to do with the speaker's personal preference. The structural level refers to the matching of turn design and actional relevance in the adjacency pair. The structural level is referred to as

alignment (Stivers, 2008). The social level refers to cooperation on the affective level, matching or even upgrading the interlocutor's affective display (Ochs, 1996; Stivers, 2008; Stivers et al., 2011), referred to as affiliation. For example, Excerpt 3.2 demonstrates how a preferred sequence of second pair parts matches both structurally and socially. In other words, the response is aligning and affiliative.

Excerpt 3.2 Preference organization (JS.II.28; Pomerantz, 1984, p. 62)

1 J: T's- tsuh beautiful day out isn't it?

2 L: Yeh it's jus' gorgeous ...

J's FPP is appraising the environment as beautiful, offering a positive assessment while inviting L to join in the appraising action through the use of the tag question "isn't it" (line 1). Structurally, the tag question prefers a yes or no response. L does so using a structurally aligning "yeh" (line 2). Meanwhile, socially, the question prefers a positive agreement as opposed to a negative and disagreeing one. L does so (line 2) with the positive response and an lexical upgrade using "gorgeous", matching J's affective stance.

Preference is a guiding principle in turn-taking organization, but it is not obligatory; it is contingent (Schegloff, 1996). Speakers are free to express their stance and provide a dispreferred turn. However, a preferred response typically advances the sequence and accomplishes the intended action efficiently. Furthermore, preferred responses are usually shorter and produced more quickly than dispreferred ones, which are often delayed and marked by disfluencies such as "well" and "uh." Speakers may also provide accounts for giving a dispreferred response (Pomerantz & Heritage, 2012).

*Progressivity.* Progressivity is about the *upcoming next*, be it a sound, a word, a turn, or a sequence (Schegloff, 2007). Specifically:



“moving from one element to a hearably-next-one with nothing intervening is the embodiment of, and the measure of, progressivity. Should something intervene between some element and what is hearable as a/the next one due should something violate or interfere with their congruity, whether sound, next word, or next turn – it will be heard as qualifying the progressivity of the talk, and will be examined for its import, for what understanding should be accorded it. Each next element of such progression can be inspected to find how it reaffirms the understanding-so-far of what has preceded, or favors one or more of the several such understandings that are being entertained, or how it requires reconfiguration of that understanding.” (p. 15).

In short, progressivity means moving from one to the next without any hindrance. Within a turn, producing a word without speech perturbation embodies progressivity. For example, in a turn such as “I don’t thank- think that is right”, when one misspeaks a word, a self-initiated self-repair (SISR) is the mechanism interactants use to repair the trouble and at the same time restore progressivity (Schegloff, 1979).

Between turns within a sequence, adjacency pairs embody participants’ orientation to progressivity. Adjacency pair is constituted of a pair of turns, usually adjacent to each other – a first-pair-part (FPP) and a second-pair-part (SPP) – produced by two different speakers, and are pair related and conditionally relevant (Schegloff, 2007). When an FPP initiates an action, a relevant, responsive action, that is the *upcoming-next* SPP, progresses the sequence (Schegloff, 1968). Whereas when an SPP accomplishes an uncalled-for action or displays the recipient’s misunderstanding, the progressivity is halted, and repair is initiated. A successful repair, again, will restore progressivity.

In other words, generally, the structurally aligning SPP progresses the sequence (I will show an alternative case in the next section). Alignment refers to structural cooperation in interaction (Stivers, 2008). That is, “aligning responses cooperate by facilitating the proposed activity or sequence; accepting the presuppositions and terms of the proposed action or activity; and matching the formal design preference of the turn” (Stivers et al., 2011, p. 21). For example, an agreement “yes, it is” to a question “It’s a beautiful day, isn’t it?” is a structurally aligning response and progresses the sequence, whereas “why would you say that?” is disaligning and puts the sequence on hold.

At the level of inter-sequences, participants’ orientation to progressivity can be seen through the use of preliminary sequences. Consider the following example:

Excerpt 3.3 Preliminary sequence (JG 3:1; Schegloff, 2007, p. 30)

- 1     Cla: Hello.
- 2     Nel: Hi.
- 3     Cla: Hi.
- 4     Nel: Whatcha doin’.
- 5     Cla: Not much.
- 6     Nel: Y’wanna drink?
- 7     Cla: Yeah.

Nelson calls Clara. After a brief reciprocal greeting, Nelson checks Clara’s availability, serving as a pre-invitation sequence. A negative response is preferred as it affords space for Nelson’s invitation. Therefore, the use of the pre-invitation sequence (lines 4-5) prepares for the successful arrival of the *upcoming next* – the acceptance of invitation (lines 6-7) and embodies progressivity.

## Data Transcription

CA uses video recordings and transcripts that provide detailed representations of what is said, how it is said, and nonverbal conduct. The transcription system used in CA, such as the adapted version of Jefferson (2004) transcription conventions used in this study, depicts interaction with precision and detail (Hutchby & Wooffitt, 2008; Psathas & Anderson, 1990; Sacks, 1984). The resulting transcripts are both objective and subjective. On the one hand, they are objective because CA transcripts aim to provide an accurate representation of the recorded data with a plethora of details included, such as speech contour, speech tempo, intonation change, loudness of speech. On the other hand, they are still produced with a particular analytical mindset, which means that they are subjective in nature (Heritage & Atkinson, 1984; Psathas & Anderson, 1990). That is, as objective as researchers try to represent the data, the inclusion and omission of segments of interaction and non-verbal description are all subjective choices researchers have to make. Transcripts are representations of realities filtered through researchers' lens. While CA transcripts cannot replace the actual data, they serve as a valuable written record for researchers to refer to when analyzing social interaction.

The data for this study were transcribed using the adapted version of Jefferson (2004) transcription conventions, which are shown in Table 2.

Table 2: Adapted Jefferson (2004) transcription conventions

<b>Verbal Utterance</b>	
*ABC:	header for speaker with camera on
#ABD:	header for speaker with camera off
=	Contiguous utterances (latching).
ab↑ cde l abcde	Overlapping utterances
(.)	Micro-pause (0.2 seconds or shorter).
(1.3)	The number inside the parentheses represents the length of the pause.
>word<	Surrounds talk that is spoken faster.
<word>	Surrounds talk that is spoken slower.

°word°	Soft speech.
*word*	Surrounds talk that is said in a creaky voice.
WORD	Loud speech.
<u>word</u>	Stress/accenuation.
:	Elongation of a syllable. Each : represents 0.2 seconds.
-	Abrupt stop in articulation. Cut-off.
↑	Marked upshift in pitch.
↓	Marked downshift in pitch.
,	Slight rise in pitch at the end of an utterance. Continuing intonation.
?	Rising in pitch at utterance end.
.	Fall in pitch at the end of an utterance.
(word)	Uncertain utterances. Surrounds the best guess.
xxx	Unintelligible syllables.
&haha	Laughter; indicate laughter particles after symbol
☺	Smile voice.
☼word☼	Breathy voice
<b>Nonverbal Conducts</b>	
*abc:	header for nonverbal conduct performer
<i>(italics)</i>	Description of nonverbal conduct
<i>LH / RH</i>	Left hand or right hand
<i>(1.3)/(LH)</i>	Description of nonverbal conduct and how long it lasts
↑&haha ↓( <i>LH waves</i> )	Nonverbal conduct overlaps with verbal utterance

To eliminate potential misreading of the transcripts, I provide further elaboration on the use of convention symbols using the following excerpt.

4 \*LIA: okay,=  
5 \*MOT: =↑at least i hope to.  
6 \*mot: ↓(*smile and gaze towards side*)

When nonverbal conducts co-occur with verbal utterances, they are marked with a pair of “↑” and “↓”. Headers for the speakers of verbal utterances are marked with capitalized letters (lines 4 and 5, \*LIA: and \*MOT:) while lowercase letters refer to the person who performs the nonverbal conduct (line 6, \*mot:). After LIA utters “okay” with a continuing intonation (line 4), MOT’s turn quickly latches on without any gap. MOT’s verbal turn cooccurs with his nonverbal conduct of smiling and gazing towards the side.

When there is only one nonverbal conduct that takes up a turn, it is marked with the duration of the conduct in the same line, separated by a slash shown in line 23.

22 \*BOL: mm hm

23 \*jie: (13.4)/(scrolling through page back and forth)

### **Analytical Procedure**

In this section, I first describe how CA analysis is conducted on from a broader and more general perspective. I, then, detail the analytical procedure I take to answer my research questions.

Integrated from Pomerantz and Fehr (1997), Heritage (1988), Schegloff (1996) and ten Have (2007), I present the general analytical procedures when doing conversation analysis:

1. Start from an activity of interest (e.g., how invitation, conversation opening is accomplished), and start building a collection of such.
2. Identify how core sequences are initiated, responded to, expanded, and closed. What action(s) are being accomplished in the process?
3. Identify ‘a grounding of this formulation in the “reality” of the participants’ (Schegloff, 1996, p. 172); this step aims to prove that the described action indeed is also understood by the interlocutor(s) as what the analyst claims to be; this is accomplished through investigating the subsequent responsive action from the interlocutor(s)
4. Provide an explication of how the turn(s) are packaged that yield(s) a recognizable action; this is done by providing “analytically the grounds for the possibility of such an understanding” (Schegloff, 1996, p. 173) by describing the use of linguistic, prosodic, non-verbal resources and timing of turn-taking;
5. also consider certain identities, ideologies, and relationships are implicated through the accomplishment of actions.

6. establish the patterns and regularities identified in the collection. Again, the patterns are how the participants orient to as normalities, not the analysts.
7. Finally, analysts provide a functional specification of the organization of interaction.

This study aims to investigate:

1. how do students interactionally organize small group activities in a synchronous online environment?
2. how do students ensure the forward progression of the activity, through what linguistic and nonverbal resources?
3. how do students resolve trouble or conflicts when the progression of the activity is stopped?

To answer research questions one and two:

1. For each group discussion session, the whole interaction was divided into smaller sequences, and the opening and closing of each sequence were marked. To do that, the core base pairs were identified first, along with the surrounding preliminary sequence and post-expansion sequences, and a side sequence was inserted within the core sequence. ELAN was used to code the data.

ELAN is an annotation tool for recordings with time stamps. The openings and closings of each discussion were timestamped and annotated for future reference. Figure 3 showed how the data were annotated.

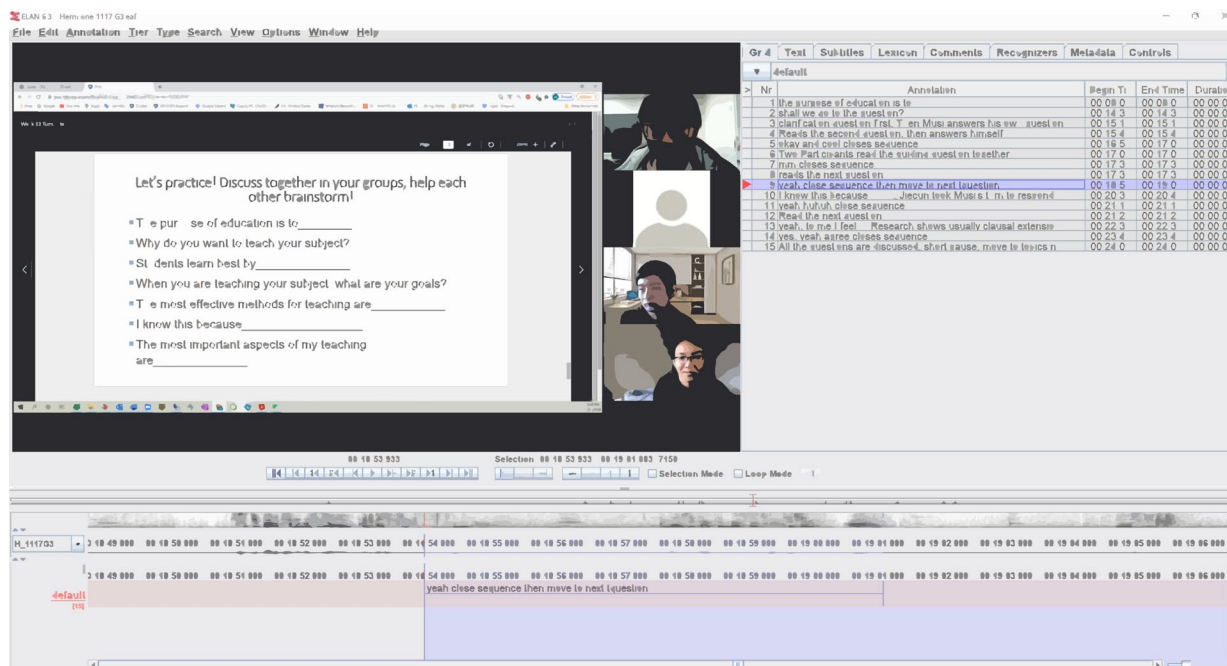


Figure 3: Annotated video data

2. The linguistic and non-linguistic resources that were used to accomplish the opening and closing were identified and counted. Insert sequences and side sequences were identified around the core base sequences. An insert sequence is a sequence that is inserted in between a first pair part and a second pair part. A side sequence refers to a sequence embedded in a larger interactional project during which participants deal with tangentially related matter that may not directly contribute to the main goal of the interactional project. The actions and practices students use to return to the base sequence were identified and counted. This shed light on the macro level, specifically the inter-sequence level rather than within-turn and inter-turn level, in terms of how interaction progressed.

To give an example, I present a stretch of interaction during one of the discussion sessions, and the analytical procedures I took to identify the core base parts, and opening and closing practices. Furthermore, I show how the macro structure of discussion is concluded from recurrent analysis of segments of student discussion. In this excerpt, the instructor has listed a

few questions for the students to discuss. They are asked to share their opinions on these questions which will eventually help them form a teaching philosophy.

Excerpt 3.4 Inter-sequence discussion structure

1 \*LIA: the purpose of education is to::  
 2 Multiple lines omitted  
 3 \*MOT: so by providing them: those (.) knowledge,  
 4 they can be a better manager in the future  
 5 (1.0)  
 6 \*LIA: okay,=  
 7 \*MOT: =「at least i hope to  
 8 l(smile and gaze towards side)  
 9 (0.8)  
 10 \*WUY: 「cool.  
 11 l(smile)  
 12 (5.0)  
 13 \*MOT: stu「dents learn best by  
 14 \*WUY: lstudents learn best  
 15 \*LIA: i say this should be their internal...  
 (Five minutes later)  
 16 \*WUY: OUR: (.) goal is to (.) combine the advantages.  
 17 (1.0)  
 18 「from the different education systems  
 19 \*MOT: l°yeah°  
 20 (0.8)  
 21 \*MOT: °mm°  
 22 \*LIA: yeah  
 23 (1.0)  
 24 \*WUY: Uhuh



25                   (4.1)  
 26 \*MOT:   (smile)  
 27 \*MOT:   the 「most important  
 28 \*WUY:           lthe most important aspect of my teaching

The excerpt marks the very beginning of a group discussion and is started by LIA's reading of the first question discussion. The sequence is opened in this manner. What follows is MOT's response to the discussion question, which is the second-pair-part to the sequence initiator. It is conditionally relevant and aligning with the interactional structure. The response is long so multiple lines are omitted. The sequence initiator and MOT's response make up the core base pair of this particular segment of the discussion. The claim of MOT's response is aligning and conditionally relevant is supported by LIA and WUY's response, using agreement and acknowledgment tokens 'okay' and 'cool' (lines 6 and 10). Therefore, each claim of what an interactant is doing is supported by other interlocutors' reactions to the prior turn, i.e., next turn proof procedure.

Next, MOT's response to the discussion is closed by LIA and WUY's tokens. This claim can be sustained by MOT's non-verbal behavior as he turns away from the monitor and disengages with the interaction temporarily (lines 7-8), and the long silence afterward (line 12). MOT and WUY then start reading the next discussion question almost at the same time (lines 11-12) to start a new sequence.

To summarize, in the first half of the example, the openings are accomplished by students reading the discussion questions (lines 11-12). The closings are done with short agreement and acknowledgment tokens, such as "great", "cool", "okay". The non-verbal resources in this excerpt include smiling and gazing away and back.

Since the focus is on the opening and closing of the sequences, the content of the discussion is omitted here. Five minutes later, the same interaction structure re-occurs. WUY responds to the discussion question, which meets acknowledgment and agreement from MOT and LIA (lines 17, 19, and 20) and closes the sequence. A lapse follows (line 23). MOT and WUY, then, collaboratively read the next question.

This method of segmenting a discussion session into smaller sequences and examining the opening and closing allows investigation of the sequential organization of the discussion sessions. I then collected and counted all the cases of sequence openings and closings, and categorized the turn design format, the results of which will be shown in Chapter 4.

To answer research question three:

1. Analytical attention was paid to the potential factors that affected progressivity, as identified in Chapter 2: intersubjectivity, epistemic issues, and lapse.
2. The actions being achieved to regain progressivity after interactional issue that stops the progression were identified.
3. The constituting turn design (linguistic and non-verbal) was identified and categorized.

To give an example, in the following excerpt, the students are doing the same activity mentioned above, sharing opinions on discussion questions that will inform their teaching philosophy. MEN's questioning and complaint stops the discussion of the prompt and analytical attention was paid to SON's resolution of the problem.

Excerpt 3.5 The purpose of education

7 \*SON: so the purpose of education, <is to:>

8 (2.4)

9 #MEN: is to::, &ha i don't know. &huh

10 (6.8)

11 #MEN: it's like a philosophical (.) philosophy (1.1) 「question.  
12 #YEL: Lmm.  
13 #MEN: ◎°like°◎ (1.3) like (0.5) what's the meaning of the li:fe.  
14 (0.7)  
15 #MEN: ʒhuhʒ  
16 (1.1)  
17 #MEN: what's the purpose of- (0.8) 「anything  
18 \*SON: lb- but i ↑think the- the goal  
of of these questions is to  
19 \*SON: hel- help ourself uh (1.0) practice the: (.) e (.) portfolio.  
20 (0.5)  
21 \*SON: so 「i- i think hermione <wants us to:> (0.4) like conduct  
22 #MEN: lyeah  
23 \*SON: our speech (0.3) by (0.4) covering all these (0.4) question.  
24 (0.6)  
25 #MEN: oh yea:h?  
26 (1.8)  
27 \*SON: So let's put som:e (.) what we will say ◎in our v- v- video here◎.  
28 (1.0)  
29 #MEN: oh yea:h. but i .hh i haven't got any answers for the-  
30 that first question.  
31 (0.8)  
32 #MEN: i think maybe to inform people,  
33 (2.6)  
34 \*SON: infor「m?  
35 #MEN: lcre- create better life &hehehehehe just kidding.  
36 (6.9)  
37 \*SON: inform (.) i think inspire may- maybe (1.1) maybe a better

38           word here,

39 #MEN: uh huh

In this excerpt, the core base pair is SON's opening, "so the purpose of education is to" (line 7) and MEN's response to the question "I think maybe to inform people" (line 32). Between the base FPP and SPP, MEN is claiming insufficient knowledge (CIK) and problematizing the question (lines 9-17), which temporarily stops the progressivity of the interaction. It stops the progression as progressivity is defined as the successful provision of the second pair part (SPP) with nothing in between that delays it. In other words, MEN's CIK delays the conditionally relevant SPP to come, and hence halts the progression of the discussion.

The analytical attention was given to the exchange between MEN and SON to identify the actions SON takes to resolve the progression halt. More specifically, by addressing "the goal of the question is..." and "I think Hermione wants us to ...", SONs borrows institutional authority and proposes a next action "let's put what we will say in the video here", orienting the group to an actional goal, and therefore, progresses the sequence and the larger activity. A more detailed analysis of this excerpt is provided in Chapter 6.

To render a comprehensive analysis, deviant cases will also be taken into account. In CA, deviant cases are key elements when analysts try to understand the normative social interactional structure (Clayman & Heritage, 2021). They are valuable sources of information because as participants manage to resolve the deviation, tacit interactional norms are made salient.

### **Summary**

This Chapter first documented the research site, participants, and data collection methods for this study. The theoretical framework of CA and its key concepts were then discussed. Last but not least, the analytical methods are shown with examples illustrating the procedure.

The following chapters will answer the three research questions. Chapter 4 responds to the first and second research questions by first describing the macro sequential structure of online small group discussion, and students' use of different practices to open and close the discussion sessions and transition between discussion questions. Chapter 5 and Chapter 6 address two aspects of the third research question by showing students' practice to regain progressivity when the discussion is halted.

## Chapter 4 Interactional Organization of Small Group Discussion

This chapter presents the findings to the first research question: how are small group student discussions in a synchronous online environment interactionally organized? To understand the interactional organization of student small group discussions, analytical attention was paid to the management of progressivity. More specifically, attention was given to how progressivity was maintained or halted in the main sequences comprising the discussions. I refer to this level of progressivity as the macro-level (inter-sequence level) progressivity. The chapter starts by presenting the macro sequential organization:

- 1). Prompt question as sequence orienting turn
- 2). One or multiple second pair parts
- 3). Agreement or acknowledgment token
- 4). Lapse
- 5). Prompt question as sequence orienting turn
  - a. reading the same question holds the progression
  - b. reading the next question progresses to the next topic

To illustrate, I show how sequences in the discussion are opened and closed, how progressivity is maintained, and how transitions to the next discussion occur. In Step One, students use three orienting practices to open discussion sequences: 1) proposing to start; 2) referring to or reading the discussion questions; and 3) proposing a next action. In Step Two and Three, one or multiple students provide aligning second pair parts, and sequences are closed by students' use of acknowledgement tokens or agreement tokens. A lapse follows (Step Four). The recurrence of orienting practices as openings and sequence closing tokens compose the

organization of small group discussions (Step 5). The order of discussion guides the progression of the activity.

### **Opening discussion sequences**

To ensure a forward progression of student activities, participants in openings need to display a collective orientation and understanding of the meaningfulness of the task (Hellermann & Pekarek Doehler, 2010). Findings show that in online breakout rooms, participants used three *orienting practices* to ensure a collective orientation during openings: 1) proposing to start; 2) proposing a next action; and 3) referring to or reading the discussion questions. Along with these practices, students often use two resources to open the discussion: screensharing and discussion questions (prompts)<sup>2</sup>, which are publicly available to all interlocutors.

More specifically, in the 20 hours of recordings (40 class sessions), the frequencies of the three practices are as follows: proposing to start was used 8 times (6.72%), proposing a next action occurred 27 times (22.69%), and referring to or reading the discussion questions occurred 84 times (70.59%). In most cases, one of these practices alone is sufficient to open a sequence; whereas in 5 occurrences, a combination of calling for the next action followed by reading the discussion questions was used.

### **Use of Orienting Practices**

In what follows excerpts from the online breakout room discussions are presented to illustrate the use of three orienting practices. Excerpt 4.1 illustrates the use of the orienting practice ‘proposing to start’ along with the use of a screenshare. It is taken from an activity in

---

<sup>2</sup> I use discussion questions and prompts interchangeably. They both refer to the text on the slides that the teacher wants them to discuss. When it is in an interrogative format (e.g., what is ...?), I refer to it as a “discussion question”. When it is in a declarative statement (e.g., talk about ...), I refer to it as a “prompt”.

which the students are asked to watch a video together and discuss the prompts the teacher provides in the slides.

Excerpt 4.1 Opening 1- Proposing to start

1        (*JIE, LIA, MOT join the breakout room roughly at the same time*)  
 2        \*JIE: 「okay um (0.7) shall we- shall we start?  
 3                l (*starts screenshare*)  
 4                (0.7)  
 5        \*LIA: yep i'm ready.  
 6        \*mot: (*nods four times slowly*)/(1.1)  
 7                (1.3)  
 8        \*jie: (*starts playing video*)

The excerpt begins when all three participants in the group enter the breakout room roughly at the same time (line 1). Without any greetings, JIE proposes to start, using the construction “shall we” (line 2). The proposal starts with the discourse marker ‘okay’, which indicates the start of a new topic (Beach, 1993; Rendle-Short, 2000; Schleef, 2008). While he utters his proposal, he starts the screenshare function, showing the video they will watch (lines 2-3). LIA and MOT signal that they are ready through verbal and non-verbal confirmations, respectively (lines 5-6). JIE’s verbal proposal, combined with the screenshare of the content, prepares the group to collectively orient to the same goal (Balaman & Sert, 2017).

This is the least frequently-used practice to open a sequence, possibly because it is the least specific one. The turn itself does not specify what is to do for the group, making it difficult for the group to reach a collective orientation. As shown above, the existence of the screenshare helps specify what the group is going to do. JIE does not need to specify the object of “shall we start (what)” to guarantee a collective orientation to the upcoming activity. In addition, in the online environment, students do not have visual access to others’ body and gaze, and therefore



lack access to whether all members are posturally aligned. LIA's verbal confirmation "yep, I'm ready" assures the collective orientation to the task.

Excerpt 4.2 shows an example of the second opening practice 'proposing a next action'. CHU uses the orienting practice to open the discussion after the teacher gives a rather vague direction to follow. Prior to the excerpt, the group was asked to watch a short video with its transcript of a teacher's attempt to resolve a student's misunderstanding. The group then needed to answer the discussion questions the instructor provided, including "what is the students' misunderstanding" and "how did the teacher address the misunderstanding?". However, the group had encountered technical issues with screensharing and the instructor Toby came in to fix it, which took quite some time.

Excerpt 4.2 Opening 2 - Proposing a next action

1       \*TEA: find something pops up as you never expected.  
 2               (1.5)  
 3       ok<sup>l</sup>ay? and then i will,  
 4       \*AVA:    lo kay.  
 5       \*TEA: yes, mm hm.  
 6       \*tea: (*leaves breakout room*)  
 6               (29.7)  
 7       #CHU: so let's (2.8) come up an answer for the first question.  
 8               (1.2)  
 9       \*AVA: ye::h.  
 10              (1.1)  
 11       #CHU: a::nd (3.3) >what do you think< (.) °the misunderstan:°  
 12       \*AVA: um i suppose tha::t  
 13              (4.2)  
 14       #CHU: i think (4.0) seven is mo:re ... (response continues)

The excerpt starts with Toby explaining what the group should do with limited remaining time after the technological issue was resolved. He asks the students to simply notice anything in the video that “pops up as unexpected” instead of answering all the prompt questions given (line 1). After a gap (line 2), the teacher adds a tag question ‘okay?’, which is confirmed by Ava. Toby closes the sequence with a confirmation and leaves the breakout room (lines 5-6), after which the group stays silent for half a minute. Ava is the only person with her camera on and is looking at the screen.

After a lengthy gap, CHU opens the discussion by proposing the next action to be answering the first prompt question. The turn is designed using a discourse marker ‘so’ indicating the opening of a new topic (Bolden, 2009), and an imperative “let’s ... ” involving all members in the group (line 7). The proposal is accepted by Ava (line 9). CHU, then, refers back to the prompt question one, and directs the question to the rest of the group using “what do you think...” (line 11).

In this excerpt, the activity for students to complete requested by Toby is rather vague. Recall that for students to progress in an activity, they first need to have a collective orientation toward an activity goal. Toby’s request for action “find something pops up as you never expected” from the video and transcript is less specific, leaving a wide range of possible topics for students to discuss. CHU relies on the collectively visible prompts and proposes a more tangible and specific action for the group to act upon.

Excerpt 4.3 shows an example of the third opening practice ‘referring to or reading the discussion questions. It occurs the most frequently, and it is the most specific one regarding what action to be performed next. The excerpt captures the opening of a warm-up discussion where the students were asked to share and review what they had learned and the activity they had done

in the prior week. The first discussion question is “what did you learn about the IRF sequence last week?”

Excerpt 4.3 Opening 3 - Referring to prompt

1        (*JIE and BOL first join the breakout room*)  
 2        (*MUS joins 2 seconds later*)  
 3        \*MUS: hi.  
 4                (1.5)  
 5        \*JIE: so: (1.0) um (2.2) what did you- what did we do: (1.1) last week?  
 6                (2.0)  
 7                we watched a video right? we watched a video and scripts  
 8                (0.8)  
 9        \*BOL: yeah.

In this excerpt, JIE’s question referring to the prompt question provided by the teacher sets up the topic of the subsequent interaction and orients the other interlocutors toward a common goal. JIE and BOL first join the breakout room and remain silent (line 1). MUS then enters the breakout room two seconds later and offers a greeting which receives no return greeting from either JIE or BOL (lines 3-4). After a fairly long silence, JIE self-selects to take a turn which starts with the discourse marker ‘so’ and refers to the prompt question regarding what they did last week (line 5). Prosodically marked so-prefaced utterances indicate the start of a new topic (Bolden, 2006). JIE’s question topically refers to the prompt question provided by the teacher but poses a wider question about what they did instead of specifically about the IRF. JIE’s question receives no response from his group members, and after another long silence, JIE offers a candidate response designing it as a declarative polar question with a tag “right?” (lines 6-7). This engenders a preferred response from BOL (line 9).

In sum, three orienting practices are used to open sequences. They vary in the level of specificity regarding what to do next. ‘Proposing to start’ only suggests the group begin the discussion. ‘Proposing a next action’ specifies the action to be performed by the group. And lastly, ‘reading or referring to the discussion question’ further specifies the content and topic of the upcoming talk as well. The practices ensure members’ orientation toward a common goal and set the direction for the upcoming interaction.

### **Order of the prompts guides discussion**

Not only do the prompt question specify what actions students are expected to perform, it was found that the students also orient to the list of questions as an agenda as well. That is, the order of answering the questions also matters. There is only one occurrence that students do not follow the order of the question, and that student is held accountable for it. Excerpt 4.10 shows the occurrence. In this class, the group activity requires students to watch a video clip of a teacher addressing students’ misunderstanding and then answer the prompt questions, the first of which being “What’s students’ misunderstanding?”

Excerpt 4.4 Order is important

1       \*LAN: (*stops playing video*)  
 2       \*LAN: >okay<.  
 3               (48.8)  
 4       \*lan: (*scrolls screen slightly once*)  
 5               (22.0)  
 6               any thoughts about the first question?  
 7               (3.1)  
 11       \*CHU: i thi:nk (.) this (.) teacher is better?  
 12               than uh the other video last week.  
 13               lines omitted, CHU explains why this teacher is better  
 14               so i think it's (1.3) it's mo:re clear.

15           (2.3)

16           °right°?

17           (1.0)

18   \*AVA: °°mm hm°°

19   \*LAN: so you are saying how the teacher address

20           students' misunderstanding?

21   \*CHU: yeah.

22   \*AVA: YEAH.

23   \*CHU: in the last video the teacher just ask some

24           hard question to @students@.

25           a:nd the students don't know what happened

26   \*LAN: >yeah yeah<.

27           (1.3)

28           i agree. (0.8) but (1.2) but what about the first question.

29           wh- what is student's misunderstanding.

LAN is responsible for sharing the screen and the excerpt starts with him pausing the video. The “okay” with a falling intonation closing the current sequence (line 2; Couper-Kuhlen, 2021). After a lengthy silence, LAN starts the discussion by referring to the first discussion question, “any thoughts on the first question?” (line 6). Instead of directly answering the question, CHU starts sharing his opinion about how the teacher handled misunderstanding by comparing two teaching videos the group has watched (line 11-13). The explanation is quite long, so several lines are omitted. The lengthy explanation receives no acknowledgment from other members (line 15), which prompts CHU to seek one by asking “right?” (line 16). AVA cooperates and provides a minimal acknowledgment “mm hm” (line 18). LAN, on the other hand, initiates a clarification question, asking if CHU is talking about *how* the teacher addresses misunderstanding, which is not what the first question asks for (lines 11-12). This clarification

request meets two confirmations, both from CHU and AVA (lines 13-14). CHU further adds some details (lines 15-17). By doing this, LAN confirms that CHU indeed is not answering the question.

LAN, though does provide agreement tokens (lines 18-20), holds CHU accountable for not answering the first question. He questions the lack of response to the first question “but what about the first question” (line 28), indicating that what CHU responds is mis-aligning. He then resorts to the orienting practices mentioned above, reading out the first question, “what’s student’s misunderstanding” even when the group has shared visual access to all the prompts.

CHU’s response is essentially helpful since the second and third prompt questions do require students to talk in more detail about the linguistic and non-linguistic resources the teacher uses to address students’ misunderstandings. However, his response only receives a very minimal response from his members and is held accountable for not answering the first question. Further, this shows that these discussion questions serve as an agenda for the discussion. CHU’s response might be facilitative for future discussion but does not fit into the current agenda, i.e., the first question.

### **Absence of orienting practice**

It was found that the absence of these orienting practices halted the progression of activity, possibly due to the lack of visual access to what other group members were doing. This is rare but occurs 5 times in the 20-hour data set. The following excerpt shows that the progressivity of group interaction is halted when orienting practices are absent and LIA’s use of the proposing a next action is able to mobilize talk and progress the sequence.

Excerpt 4.5 Lack of orientation

1        (*video stops playing*)

2                    (25.3)

3 \*LIA: so it seems like we need to talk about (1.2) 「what  
4 \*SON: †yeah  
5 \*LIA: we learned from that video.  
6 \*SON: mm.  
7 (7.0)  
8 \*LIA: 「>so i remember<  
9 \*SON: †actually she repeat twice that the key point  
10 here is ...

In this excerpt, the group is asked to watch a short video, through screenshare together, of a person delivering her teaching philosophy and discuss what they learned from it. The excerpt starts with the video coming to an end (line 1). The transition to the discussion awaits. During the 25 seconds of silence, there is nothing actionable that the whole group can orient to (line 2). The whole group seems to be simply looking at their screens. LIA eventually proposes a next action (line 3). The turn is designed in a direct way – specifying what the action needed to be done is – with an epistemic downgrade (Heritage, 2012), using “it seems”. Acknowledged twice by SON (lines 4 and 6), the proposal receives no response for 7 seconds until SON and LIA both respond to the proposal with aligning responses and start sharing in overlap. The sequence is thus progressed by LIA’s proposing a next action.

Though not frequent, the consequence of the absence of orienting practices is dire. The longest silence in the data recorded when no orienting practice was used was approximately 3 minutes. In other words, no member in the group took the initiative to open the discussion, and the group simply stayed silent, which does not contribute to an effective and production group discussion.

### Returning from a side or an insert sequence

As shown in the above section, verbal or visual (screenshare) reference to the prompt question is used to organize and orient student actions in discussions during sequence openings. It was also found that when an insert sequence or side sequence temporarily breaks the progressivity of the interaction (Schegloff, 2007), referencing the prompt question steers the interaction back to the main sequence. Recall, an insert sequence refers to a sequence inserted between a first pair part and a second pair part in an adjacency pair. A side sequence, on the other hand, refers to a sequence embedded in a main interactional project but poses a temporary halt in the ongoing activity. Excerpts 4.6 and 4.7 exemplify students' practice of using prompt questions to return to the main sequence after an insert sequence and a side sequence, respectively.

Excerpt 4.6 Return from insert sequence

- 1        \*BOL: does anybody wanna (0.9) um (0.8) go ahead?  
 2                (1.3)
- 3        \*WUY: u:h let me first check the question
- 4        \*MEN: yeah i (pasted) the questions in the: chat  
 5                (1.6)
- 6        \*WUY: oh i see  
 7                (4.4)
- 8        \*MEN: okay there are three questions.  
 9                (6.7)
- 10       \*BOL: so how was it.
- 11       \*bol: (*smirk*)/(5.0)
- 12       \*BOL: how do you feel.
- 13       \*MEN: i think everyone performs very well



Excerpt 4.5 shows BOL's use of referencing the prompt question to return from an insert sequence. The excerpt captures the very beginning of a group discussion. The task was for students to discuss three sets of questions, the first of which was "how was the MTTB<sup>3</sup>? What did it feel like to be a teacher?". After all three members, BOL, WUY, and MEN, enter the room, without any greeting, BOL first proposes to start the discussion, "does anybody wanna go ahead?" (line 1). No second pair part is provided; instead, WUY adds an insert sequence in which he states that he wants to check the questions first, this turn temporarily halts the interaction (line 3). WUY's concern is resolved by MEN who pastes the questions in the chat box, which makes all the questions visibly accessible to the members (line 4). WUY confirms seeing the questions, closing the insert sequence (lines 6-7), and MEN re-completes the closing (Hoey, 2018) with a formulation (line 8; Barnes, 2007).

A long silence follows. Although the insert sequence is closed, the anticipated second pair part to BOL's proposal to start is not forthcoming (line 9). After a lengthy silence, BOL changes his original practice of proposing to start to directly referencing the prompt question, "how was it" ("it" refers to "the MTTB") (lines 10). Receiving no response (line 11), BOL follows up with the second half of the question "how do you feel" (line 12) and MEN provides a response (line 13). The progressivity is restored. BOL's two questions do multiple actions at the same time: 1) orienting the group again to the discussion questions by recycling the written prompts; 2) holding others accountable for answering the questions; 3) regaining progressivity when the first question is left unanswered.

Excerpt 4.6 shows an example of using the prompt question to return to the main interactional project from a side sequence. A side sequence differs from an insert sequence in

---

<sup>3</sup> MTTB stands for Micro Teaching Task B, which is the second major presentation assignment the students need to complete. The task involves explaining a concept in the students' field to the rest of the class.

that initiates a separate sequence to deal with certain business that is tangentially related to the activity goal while an insert sequence is inserted between a first pair part and a second pair part. Prior to the excerpt, the group has already discussed two prompt questions but gets sidetracked by one member's question about their assignments for the course. One of the assignments, Journal Four, requires the students to attend workshops offered by a university organization and to write a reflection after attendance. WUY expresses concern that it may be getting too late into the semester for him to find an available workshop to attend (line 1), approaching the end of the side sequence.

Excerpt 4.7 Return from side sequence

1        \*WUY: so have you finished your journal four?  
 2                (multiple lines omitted)  
 3        \*WUY: it's hard for me to find some new workshops.  
 4        \*MEN: yea:h.  
 5                (21.3)  
 6        \*MEN: the third question is how were the (.)  
 7                the esp workshops and how can apply  
 8                what you learned in teaching  
 9                (15.6)  
 10                I think i remember for the workshop is that...

WUY's expression of concern receives an agreement from MEN with an elongated falling intonation "yeah" (line 2), followed by a rather long silence (line 3), closing the side sequence. To return to the main sequence of the interactional project, MEN reads the third discussion question (lines 4-6). A lengthy silence follows. Eventually, she self-selects and starts sharing (line 8).

To summarize, similar to the sequence openings, a reference to the prompt question or reading the question provides an anchor for orienting the group to the main activity and progressing the interactional project when it is temporarily halted by a side or insert sequence.

### **Closing and Transitioning to a next sequence**

In this section, I illustrate how the smaller sequences in a discussion are closed and transitioned to the next sequence. Through this, how inter-sequence progressivity is managed by the students is made visible. It is found that the common methods of closing are the use of agreement tokens, such as ‘yeah’ and ‘I agree’ or a receipt token ‘mm hm’ and ‘right’. These are referred to as sequence closing thirds (Schegloff, 2007). A lapse follows (Hoey, 2018; Sacks et al., 1974). The interaction is transitioned to the next sequence by students’ reading the next discussion prompt. This is different from mundane interaction as it is found that participants predominantly return to the original topic after a lapse (Hoey, 2018) whereas in group discussion, participants tend to move on to a new topic. Excerpt 4.7 shows an example of participants’ use of agreement tokens to close the sequence and transition to the next sequence within a larger sequence revolving around one discussion question. The activity in progress focuses on a series of discussion questions posed by the teacher regarding answering student questions in class when teaching. The group is currently discussing what a teacher should do if students give the wrong answer.

Excerpt 4.7 Agreement tokens

- 1        \*WUY: and maybe they can find the (0.5) better answer
- 2                (1.1)
- 3        \*MEN: YEAH. i agree with you.
- 4        \*men: (*head nod*)

5 \*MOT: °yeah° >i think that's a very useful skill<.  
6 also i remember they talk about that (.) to  
7 encourage students more, like he's very close,  
8 (0.6)  
9 †BUT. °but°  
10 \*WUY: lyea:h  
11 \*MEN: mm hm yea:h  
12 \*MOT: (6.2)/(head turn to side monitor)  
13 \*MEN: †and you can always rephrase the question to make  
14 \*mot: †(head turns back to main monitor)  
15 it more clear.  
16 (0.8)  
17 \*MOT: yeah  
18 (0.9)  
19 \*WUY: mm hm  
20 \*MOT: (head turn to side monitor again)  
21 (21.0)  
22 \*MOT: <what expressions can you use> to be clearer

WUY first finishes sharing his answer to the question (line 1). MEN provides an agreement using a loud ‘yeah’, and an explicit verbal agreement, “I agree with you” accompanied by a head nod (lines 3-4). This is followed by MOT’s agreement and positive assessment (line 5). Both members’ agreement with WUY’s response serves as a pre-closing to the sequence. Similar practice is used in whole class discussion as well (explicit positive assessment; Waring, 2008)

MOT’s speech production reveals more about how he orients to both WUY’s and MEN’s agreement tokens as sequence closing markers. MOT add his opinion to the answer (lines 6-9), but part of his response is overlapped with WUY’s agreement (line 10) after which MEN adds

her agreement tokens as well (line 12). His turn starts from a loud ‘but’ then transitions to a quiet ‘but’ as overlap occurs. He then abandons the TCU and turns his head to the side monitor (line 12). Therefore, the other two members’ agreement tokens close the current speaker’s response sequence even when MOT showed clear attempts to continue his turn.

Finally, MEN adds her response and MOT and WUY provides agreement tokens (lines 13-19). MOT again turns his head to the side, indicating his disengagement with the current sequence, closing the sequence. A 21-second long lapse follows (line 21) and this larger sequence is closed. The next sequence discussing the next prompt question is opened by MOT reading the question out loud (line 22). Structurally, Excerpt 4.7 shows how a discussion sequence revolving one discussion question is marked by response-agreement token pairs (lines 1-4; lines 5-11; lines 13-19). Members orient to these tokens as closing of the ongoing sequence (lines 9 and 12).

In Excerpt 4.8, it is made even clearer how students’ recurrent use of sequence closing thirds and opening turns compose an ordered and organized structure of sequences. Each student provides a response to the discussion question, which receives agreement from the other two members, verbally or non-verbally, followed by a lapse closing the sequence. The group collectively moves on to the next discussion question with the orienting practices previously identified. The class has been analyzing IRF (Initiation-Response-Feedback) sequences in classrooms. The excerpt captures the beginning of the second discussion of the day, which focuses on the F part.

Excerpt 4.8 Receipt token

1        \*LIA: ↑what is challenging or easy we- when giving feedback or  
 2                responding to students’ response,=  
 3                =.hh (>i think<) the the easiest way is uh just say:

4 good. okay. you are right. &huhuh

5 \*MOT: uh huh

6 \*LIA: how about the the challen- the challenging part

7 is understand what the student (.) idea

8 and give some useful, (.) response,

9 (4.6)

10 °i don't know°.

11 (0.9)

12 \*MEN: (*smile*)

13 (2.6)

14 \*MEN i think when the students is answering the question, (.)

15 not that correctly, or not even relevant.

16 then the- then it will be very challenging.=

17 =because it's hard to really (1.6) mm say- i mean

18 (0.5)

19 \*LIA: xxx cannot be cannot criticize students. right?

20 \*MEN: 「right. YEAH. exactly.

21 \*MOT: l°right°.

22 (1.6)

23 \*MEN: and you have to: maybe you have to (.) convert that

24 to the relevant things and it will be: a little

25 bit challenging, since maybe these two things

26 are not even relevant so=

27 \*LIA: =right

28 (1.9)

29 \*MOT: (*nod*)

30 (2.1)

31 \*LIA: how should you respond when students provide the incorrect...

After a brief greeting among the three group members, LIA directly starts the discussion by reading out the first question on the slide (lines 1-2), after which he quickly answers the question himself (lines 3-4). The first discussion item is a two-part question, namely, what is *challenging* and *easy* when giving feedback or responding to students' response. LIA's first response answers the first half of the question, which receives a receipt token, "uh huh" from MOT (line 5). This effectively closes LIA's response to one half of the question, and allows LIA to proceed to the other half of the question by saying, "how about the challen- challenging part". The members' collective reference to the prompt questions on the slide is sufficient for them to recognize that LIA is moving on to the second part (a similar phenomenon is observed in research on business meetings; Nielsen, 2013). LIA, with an emphasis on "challenging", highlights that the topic has changed (line 6). This time, his response ends with a continuing intonation (line 8), followed a fairly long silence. Possibly because of the continuing intonation marking his TCU has not yet come to an end and hence keeping the current conversation floor (Wennerstrom & Siegle, 2003), there is no receipt token produced from his group members. LIA then downgraded his certainty by quietly saying, "I don't know" (line 10) with a falling intonation. MEN uses a smile to acknowledge LIA's response (line 12; Hall et al., 2019), followed by a silence, closing LIA's response to the second half of the question.

MEN adds her own opinion towards the second half of the question (lines 14-17). LIA finishes her turn (line 19) along with a confirmation check "right?", and is agreed upon by the rest two group members in overlap (lines 20-21). MEN further expands on the idea (lines 23-26) and receives a verbal agreement, "right" (line 27), and a non-verbal one (line 29). A lapse follows (line 30). These receipt tokens and the lapse signal the sequence closing and prompt LIA

to proceed to the next question. He reads out the second question on the slide (line 31), and the discussion continues.

Excerpts 4.7 and 4.8 have shown how inter-sequence progressivity is managed by the students. Each sequence focusing on a discussion question unfolds with actions in which participants provide their answers to the question. Their contributions are confirmed by receipt tokens or agreement tokens from the team members. A lapse of silence follows. Participants can either further pursue the same question by adding their response or reading or referring to the next discussion question to transition to the next sequence.

It is established that reading the next discussion question can progress the larger interactional activity. It is also found that reading the same discussion question after one or multiple second pair parts are provided, however, can temporarily halt the progressivity of the interaction from moving on to the next sequence. The occurrence of this practice is 12 times across the data set. Comparing to the 84 times used to open a discussion sequence, remaining at the same discussion question is a lot less frequent, and reveals participants' inclination to move forward.

Excerpt 4.9 shows that JIE stops transitioning to the next discussion question by reading the same discussion question as a post-expansion of the sequence. The discussion topic is about how teachers can manage student responses and encourage student participation. Currently, the group is discussing this prompt question, "what are some common ways to mitigate the silence/resistance from the students?". And JIE's response is coming to an end (line 1)

Excerpt 4.9 Hold the progressivity

- 1        \*JIE: it the common thing in the- in the- in- in a  
 2                group of people. right,  
 3                ↑ (2.6)



4 \*MOT: l(*looks to side, nodding head*)

5 \*JIE: 「in the

6 \*MOT: lalso I thin-

7 (0.7)

8 \*MOT: sorry (.) go (.) go on

9 \*JIE: go ahead. you go ahead

10 \*MOT: I think another point is that maybe the teacher should provide

11 (in) motivation for the student to speak out like they can in the

12 in the first class, the professor can said, I will keep record on

13 how much you say in the class. and if you don't contribute

14 valuable information in the classroom,

15 \*MOT: you will get a lower (0.8) 「final score.

16 \*JIE: lparticipa- participation score.

17 ↑OH. &hehe

18 (3.3)

19 \*JIE: mm °some common ways to mitigate the silence°

20 (4.6)

21 ANOther (1.8) another feasible way is to ...

JIE ends his response with a falling intonation, and adds a tag question, ‘right’ (line 2). Only MOT provides a non-verbal agreement – a head nod while looking to the side. Regardless of whether JIE sees MOT’s agreement, MOT treats the head nod as a closing for JIE’s response (Whitehead, 2011) and starts to share his response, which overlaps with JIE (lines 5-6). The floor is yielded to MOT where he starts to share extensively his idea about encouraging students’ participation (lines 10-15). JIE collaboratively completes MOT’s response and the current sequence is closed by JIE’s change of state token ‘oh’ (Heritage, 1984), laughter, and the following lapse (lines 17-18).

At this point, from what has been shown previously, two kinds of actions are contingent at this sequential location when a response to a discussion question is given: 1) one member can give another second pair part to the initiating prompt question; or 2) one member can make a reference to or read out the next prompt question to progress to the next sequence. However, a third type of practice is present here: reading the same prompt question to stop the progression to the next sequence in the interactional project. JIE, in a quiet voice, repeats the same question (line 19) and provides a response to his own question after a 4.6-second gap. Reading the same prompt question then works as a post-expansion of the sequence and stops the interaction progression to the next topical sequence.

### **Closing thirds cause dissatisfaction and disengagement**

Although the sequence closing thirds, receipt and agreement tokens, work effectively at closing the sequences, it is also minimally aligning and expanding (Schegloff, 2007). It is found that students are at times dissatisfied when their responses to the prompts receive a mere single-word token. Nine instances were identified when students either showed visible signs of dissatisfaction, or they simply disengage with the discussion completely. Excerpt 4.11 is an example of MEN showing dissatisfaction after her contribution receives a mere acknowledgement. In this excerpt, the group is tasked to brainstorm questions to ask their professors about teaching strategies. The goal is to come up with five questions to ask as a group. They also need to type the questions down on a discussion board located on the course management system. The excerpt starts with MEN's sharing of her idea (lines 1-2).

Excerpt 4.11 Disaffiliation towards receipt tokens

1        \*MEN: since it can help increase the: (0.9) the participant-  
 2                    participation of the students  
 3                    (2.7)

4 \*MEN: (*sighs then compresses lips*){1}  
 5 \*BOL: °yeah°.  
 6 \*JIE: yeah. okay,  
 7 \*MEN: (*smiles briefly then compresses lips again*)  
 8 \*BOL: °yeah°.  
 9 (1.3)  
 10 \*YEL: like one thing i may want to ask

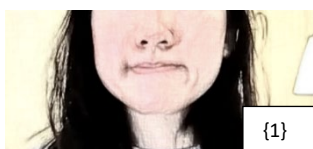


Figure 4: MEN's facial expression

MEN receives no agreement or acknowledgment token after she shares her response (line 3). She then sighs and compressed her lips inward showing dissatisfaction (Navarro, 2009), as shown in Figure 4. Both BOL and JIE produce receipt tokens immediately after, but with no expansion (lines 5-6). MEN, having heard their receipts, smiles for a brief second then transitions to a lip compression again (line 7). After yet another acknowledgment by BOL in a quiet voice (line 8) and a gap (line 9), YEL starts sharing his idea (line 10).

We see that MEN is not satisfied with her teammates' use of minimal receipt tokens. From her sigh and lip compression, she shows disaffiliation with her group members. These minimally expanding tokens discourage discussions. The following two excerpts shown instances where the group discussions simply end after sequence-closing tokens. They are captured in two separate group discussions in one class session with the same group members. MUS's response, at both times, meet minimal acknowledgment and the discussions simply end afterward.

## Excerpt 4.12.1 Disengagement 1

1 \*MUS: u:::m (2.0) so in the article there's another  
 2 skill that when one student gives the wrong answer,  
 3 and maybe we can ask the other students in the  
 4 classroom to help him to complete the answer.  
 5 right?

6 \*LIA: yeah.

7 SILENCE UNTIL THE END OF DISCUSSION

## Excerpt 4.12.2 Disengagement 2

1 \*MUS: the main point is to get- get other people understood.  
 2 right?

3 (6.7)

4 #YEL: °mm hm°.

5 (4.3)

6 #LIA: 「okay,

7 \*MUS: l (*puts on headphones and disengages until teacher comes*)



Figure 5: MUS puts on headphone

In this group, MUS is the person who mostly shares his idea with the group and the only person who has the camera on. Both times, at the end of his sharing, he adds a confirmation check, “right?” (line 5 in Ex 4.4.2 and line 2 in Ex 4.12.1) to seek other member’s responses. Both times, he receives very minimal agreement from his group members (line 6 in Ex 4.4.2 and

lines 4 and 6 in Ex 4.12.2). The discussion then ends after the single-word tokens; all members disengage (shown in Figure 5). They stay silent until the instructor call them back to the main room. There are more questions to discuss but they do to tend to them. Especially in Excerpt 4.12.2, during the discussion, MUS does not wear his headphones. After YEL and LIA's minimal response, he puts on his headphone and possibly starts watching/reading other content, based on the fact that he was smiling from time to time after disengagement with the discussion.

### **Summary**

Reaching a collective orientation toward the same institutional goal is of utmost importance. In FTF contexts, checking what others are doing, and what members are orienting to are accomplished nonverbally and visually (Hellermann, 2008). However, in Zoom breakout room, there is limited visual access for the group members to see what others are actively doing. For most, what is visible is limited to other members staring at the screen, nodding, or looking away. To ensure clear and collective orientation to the same goal, students propose to start the discussion, or they propose a specific action for the group to perform. Most frequently, the action to perform is to discuss a specific discussion question. It is accomplished by one member reading the prompt questions or making clear references to the questions to initiate a discussion sequence. Nonverbally, screenshare also plays an important role in the interaction as it is the only shared visual source that the entire group can look at simultaneously.

After an opening, group members provide their corresponding second pair parts to the question, which will receive a collective agreement or acknowledgment and a lapse closing the ongoing sequence. Members then have two options: 1) to read the next question and progress to

the next discussion question until all the questions are answered; or 2) read the same question to maintain in the current discussion question.

It is also found that due to the nature of the agreement and acknowledgment tokens being minimally sequentially expanding, the sequential position after Step Four – the lapse is vulnerable to a halt in progressivity between sequences. Chapter Four first expands on this finding, and then show two practices used by the students at post-lapse position to progress the sequences: interrogative with recipient titled epistemicity and any other/ some other interrogative.

The findings on sequential structure are largely in line with how small meetings are progressed (Nielsen, 2013). It is found that meeting chair uses meeting agendas to move from one large sequence to another. They also recycle the linguistic items in the written agenda as the turn to initiate a new sequence. These texts work as an orienting resources for group members to focus on one common item to discuss.

In addition, in the online setting, limited visual access to other participants poses a challenge for group members to perceive the actions of others. This finding resonates with previous studies that have highlighted the unique communicative affordances and constraints of computer-mediated communication platforms. The role of screenshare as a shared visual source is also identified, reflecting the reliance on technological features to compensate for the lack of visual access in online interactions.

## Chapter 5 Breaking the Silence Post-lapse Practice to Regain Progressivity

This chapter answers one aspect of the third research question: how do students resolve trouble or conflicts when the progression of the activity is stopped? First, the chapter shows that the lapse after sequence-closing-thirds are vulnerable to halts in progressivity. Second, the chapter presents two practices used by the students at post-lapse position to progress the sequences: interrogative with recipient titled epistemicity and any other/ some other interrogative.

### Lapse: the vulnerable position

Lapses occur at sequence endings when no members self-select to speak (Hoey, 2015, 2018). Previous research has shown in mundane interactions, lapses tend not to last long. In mundane English interaction, for a lapse to not be treated as problematic or a “conspicuous absence of talk” (Hoey, 2015, p. 442), they can only be a maximum of 0.5 to 1 second based on findings from different studies (Hoey, 2017; Jefferson, 1983). It is found that in online small group discussion, lapses are treated as problematic as well. Excerpt 5.1 shows an example. The group has received a series of directions about reading multiple articles on the course management system and talking about how these articles inform their teaching philosophies.

Excerpt 5.1 Lapse treated as problematic

- 1 #MEN: mm maybe we can first watch this video,  
 2 (4.2)  
 3 the teaching philosophy video by meggie banks?  
 4 (2.4)  
 5 \*SON: we should have watch it 「u:h last week.  
 6 #YEL: lwe have- we have watch that before i think.

7 #MEN: OH OH ↑OKAY, i see:.

8 (1.9)

9 ↓oh yeah. i forgot that.

10 (2.5)

11 so okay,

12 (5.2)

13 yea:::h?

14 (1.7)

15 so we can (1.7) <start to brainstorm>?

16 (0.7)

17 what's our (0.5) plan.

18 (0.6)

19 \*SON: ☹°u:::~:~:h°☹ maybe let's skim that article first?

20 #MEN: okay. it's not very short. actually

MEN proposes a next action – first watching the video on the PowerPoint slides – to the group to start the discussion, but receives no response (lines 1-2). After a long silence, she specifies the video being the teaching philosophy by Meggie Banks (line 3) by adding an extension to the clause. The proposal is implicitly rejected by both SON and YEL, pointing out that they have watched the video (lines 5-6), which is acknowledged by MEN in a loud voice (lines 7), closing the sequence. A lapse follows, lasting for around 2 seconds (line 8). With no one speaking, MEN adds another acknowledgement of the mistake she made, re-closes the sequence (line 9) and another lapse follows. At this point of the interaction, two lapses follow MEN's acknowledgement, and a new orienting practice needs to be in place for the interaction to continue. The absence of such results in the lapses being treated as problematic.

MEN's following reaction with "so okay" in a continuing intonation and the elongated "yeah" with a rising intonation are indicative of MEN's orientation to the two extended silences,



questioning the lack of any verbal contribution to the interaction at the lapse position. This again receives no response from the group members (lines 12 and 14). She initiates her own orienting practice – proposing a next action (line 15), and holds the other members accountable for not participating in the collective decision-making process (line 17). This finally draws the other two members' responses, in which SON proposes a next action (line 19).

Furthermore, it is found that lapses between main discussion sequences are vulnerable positions that can potentially lead to a prolonged halt in progressivity, during which students stay in silence and show no visible sign of engagement. Excerpt 5.2 shows an example of this. Three members, LAN, CHU, AVA, have just watched two video clips of two teachers answering student questions through LAN's screenshare. The task is to contrast how the teachers address students' misunderstandings differently. The videos are accompanied by transcripts; the interface is shown in Figure 6.

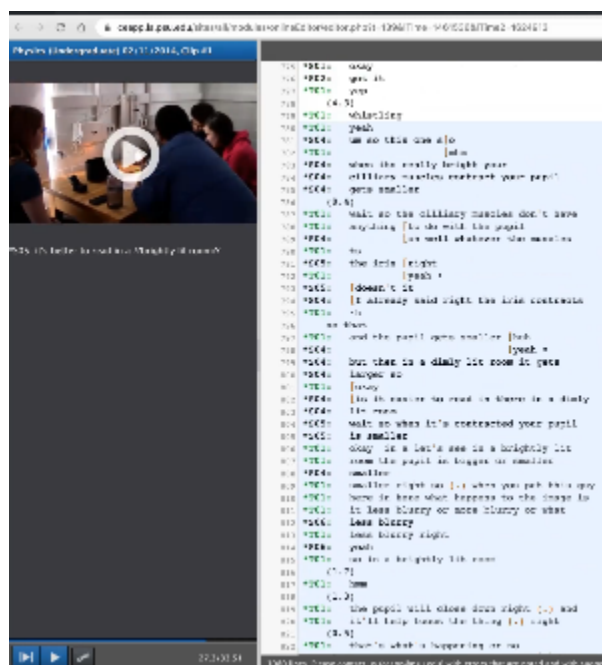


Figure 6: Video Interface<sup>4</sup>

<sup>4</sup> The screengrab is blurred to protect the database since it is password protected.

## Excerpt 5.2 Lapse halts progressivity

1 #lan: (*pauses video on his screenshare*)  
 2 #lan: (*scrolls to the beginning of the transcript*)/(7.2)  
 3 #LAN: >okay<.  
 4 (48.8)  
 5 #lan: (*scrolls down the screen once*)  
 6 (22.0)  
 7 any thoughts about the first question?  
 8 (3.1)  
 9 #CHU: i thin:k this teacher is better? (.) than

The excerpt begins when the video stops playing (line 1). LAN scrolls to the beginning of the transcript and says “okay” with a falling intonation, marking the closing of the current activity and the transition to the next (lines 2-3; Couper-Kuhlen, 2021). However, what follows is a minute-long silence during which LAN scrolls the screen once (lines 4-6). No one self selects to continue the interaction and the lapse leads to no visible engagement of the task at hand. Progressivity of the main activity is halted until LAN uses an orienting practice – referring to a discussion question (line 7) and the interaction restarts as CHU provides an SPP (line 9).

In this example, the lapse solidifies the closing of the prior activity that they are doing. There is a need for a member to open the next sequence, orienting the group to the next activity. Otherwise, the lapse will simply continue to last and the progressivity of the discussion is halted, as briefly shown in Chapter 4 as well. The lapse position is therefore vulnerable to a halt in progressivity and participants’ disengagement. LAN finally uses the orienting practice referring to a discussion question (line 7) and the interaction restarts.

As shown, in online small group interactions, lapses are vulnerable to an interactional breakdown or are treated as problematic. In mundane interactions, it is acceptable to end the interaction after a lapse (Hoey, 2018). In group discussion settings, however, there is a larger institutional goal at hand, which is to complete the tasks assigned by the teacher. A lapse and no further talk is hence a halt in progressivity towards to activity goal. The following sections focus on the post-lapse position; specifically, what participants do to draw other members' contributions to progress the activity.

### **Solution: Mobilizing response**

In mundane interaction, after a lapse, interactants generally have three moves: 1) end the interaction; 2) continue the prior talk; 3) start a new topic (Hoey, 2018). Predominantly, in mundane interaction, interactants choose to continue with the prior talk. In classroom discussions, students have the institutional obligation to complete the tasks. In consideration of the larger activity, which for the group members, is to discuss prompt questions and share ideas, staying silent and not moving on to the next sequence is a halt in progressivity. Students generally departed from the lapses and silences, and mobilized and held other members accountable to talk. The cases where students disengaged have been shown in Chapter 4.

As reviewed in Chapter 2, Stivers & Rossano (2010) identified four resources to mobilize a response from an interlocutor: interrogative morphosyntax, interrogative prosody, speaker gaze, recipient-tilted epistemic asymmetry. In online group discussions, gazing is a resource that is unavailable for the interactants. Participants had to rely more heavily on the remaining three resources to mobilize other members' responses. From the data, students used two practices

heavily to draw other members' responses: 1) speaker selection and tilted epistemics and 2) any other / some other interrogatives.

### **Solution 1: Speaker selection and tilted epistemics**

The first set of practice that mobilizes participation between sequences at the post-lapse position is for one member to select another particular member or the rest of the group members as a whole as the next speaker. The frequency of the usage is the following: 3 occurrences of direct nomination of a member, and 6 occurrences of selecting the group as whole. The design of the speaker selection turn also incorporates recipient-titled epistemic asymmetry as a resource. Excerpt 5.3 is an example of AVA selecting the rest of the group as the next speaker, seeking their opinions.

Excerpt 5.3 speaker selection and tilted EP (Toby 1109 G1 9:40)

- 1       \*AVA: he has a better body language maybe, >i- I'm < not sure.  
 2           it's just like a sensation that i had.  
 3           (0.5)  
 4       xxx what about (0.5) the rest.  
 5           (1.4)  
 6       what's your opinion.  
 7           (6.8)  
 8       #HYE: yeah, i agree with you ava. i don't exactly remember what...

The group is comparing two teachers' teaching videos and discussing how they respond to students' answers. AVA expresses her opinion and ends it with an epistemic downgrade (Heritage, 2012) – “I'm not sure” and “it's just a sensation that I had” (lines 1-2). A lapse follows (line 3). She then opens the floor to the other members, saying “what about the rest” and “what's your opinion” (lines 4 and 6). The two turns allocate the next turn to the other members,

using interrogative syntax to seek their opinions, and therefore recipient-epistemically-tilted. This successfully draws HYE's response and progresses the activity.

Less frequently, students nominate specific group members to respond to a question. Nominating immediately holds the person accountable for providing a response (Looney & He, 2021; Mehan, 1979). Excerpt 5.4 illustrates MEN's use of nomination to maintain progressivity and to elicit other member's participation. The group is preparing for an upcoming assignment, interviewing their mentors or colleagues who are experienced teachers regarding effective teaching strategies. In this discussion, students are to come up with specific interview questions to ask and post them on the discussion board in the course management system.

Excerpt 5.4 mobilize later (H\_1110\_G1\_5:40)

- 1        \*BOL: how he develop (0.5) uh teacher's voi- voice  
 2        \*MEN: *(type down the question)*  
 3                (3.8)  
 4        \*MEN: good question.  
 5                (2.4)  
 6        \*MEN: yexi do you have any ideas what- what question do  
 7                you wanna ask.  
 8                (1.3)  
 9        #YEX: u:h i have to think about that.  
 10                (0.7)  
 11        #YEX: mm:..  
 12                (1.7)  
 13        \*MEN: yeah.  
 14                (0.6)  
 15        \*MEN: take your time to think about that.  
 16                so we now have two questions  
 17                (2.5)

18 #YEX: okay. u:hm  
 19 (5.2)  
 20 \*MEN: i think one question i would like to ask is  
 21 (*continues talking*)  
 22 #YEX: like one thing i would like to ask is ...

Prior to the excerpt, MEN has shared one question she will ask, and the excerpt starts as BOL finishes sharing his question about teacher voice (line 1). MEN acknowledges BOL by typing the question down and offering a positive assessment (lines 2-4). This closes BOL's response sequence and a lapse follows (line 5). YEX is the only person who has not yet shared his interview question.

At this post-lapse position, MEN nominates YEX as the next speaker to progress the discussion, asking him what questions he wants to ask (line 6). This turn utilizes two resources to mobilize participation: 1) the turn directly selects YEX to speak; and 2) the design of the question is epistemically recipient-tilted toward YEX, seeking his personal opinion. This successfully draws YEX's participation. He states that he "will have to think about it" (line 9), and thus does not provide an aligning response to the interactional project, i.e., providing an interview question. In other words, his response does not effectively progress the discussion sequence yet. MEN acknowledges YEX's disaligning response and closes the sequences with a gist formulation (Barnes, 2007) – "we now have two questions" (line 16).

YEX attempts to participate in the discussion again, starting with a topic initiating 'okay' (Couper-Kuhlen, 2021), and occupies the floor with an elongated 'u:hm' (line 18), but after a long silence, MEN self selects to provide another interview question she will ask to progress the discussion. YEX's response does not come until MEN finishes her contribution (line 22). In this example, at the post-lapse position, MEN's next-speaker selection and epistemically recipient-

tilted question successfully draw out YEX's contribution that progresses the discussion, even though the aligning response comes minutes after MEN's mobilization as YEX displays difficulty in providing an interview question (line 9 and line 18).

The mobilization turn was found to accomplish two actions at the same time, a "double-barreled" turn (Schegloff, 2007, p. 76). Shown in Excerpt 5.5, LAN's turn mobilizes both HYE's agreement and formulation action, effectively closing the previous sequence, and a sequence progressing action one after another. The group is again working on a module called addressing students' misunderstanding. The teacher has selected episodes of some teachers addressing student questions, and the group is using the same interface and working on a video/transcript analysis. The goal of this activity is to analyze how the teacher 1) understands what exactly the students' misunderstanding is and 2) addresses the misunderstanding. Students are asked to discuss the questions and note down their findings on the discussion board on the course management system.

Ex 5.5 Double-barreled mobilization

1       #LAN: so from the context what i observe is i think the instructor  
 2                didn't understand the students' questions  
 3                (a few lines omitted)  
 4                blah blah blah.  
 5                (1.7)  
 6                what do you guys think.  
 7                (4.8)  
 8       #HYE: ↓yea::h (1.2) that's right  
 9                (2.8)  
 10       #LAN: ALright. let's let's write it down  
 11                (1.0)  
 12       #HYE: YEP.

13 (4.3)  
 14 #HYE: she needs to clarify more students'  
 15 question before answering yeah=  
 16 #LAN: =yeah. COrrrect.  
 17 (1.1)  
 18 #HYE: yea:h, and (.) I: (.) ACTUally i don't like  
 19 her hand gestures? i mean there's they  
 20 are (.) meaningless, actually during- .hh  
 21 but she doesn't stop using (.) i mean moving  
 22 her hands (0.9) all the time.  
 23 #LAN: 「>okay<  
 24 #HYE: lit's very distracting. yeah.

After the group watches the videos and transcripts together through LAN's screenshare, LAN first starts sharing his negative opinion about the instructor's performance (lines 1-4). The response is quite long and several lines are omitted. A lapse follows (line 5). There is no sequence closing acknowledgment or agreement token that follows. This prompts LAN to pursue other members' responses (line 6). The design is again selecting other members as the next speaker and incorporating recipient tilted epistemic asymmetry. The action is seeking information, but the proposition is unclear to the analyst. The turn can be interpreted as "what do you think of my assessment of the teacher's performance?" or "what do you think of the teacher's performance?". As will be shown, HYE in fact orient to both aspects of the question and progresses the sequence.

HYE first orients LAN's question as the former, offering a positive evaluation of LAN's response (line 8). LAN completes the sequence, saying "let's write it down" and HYE re-completes it with a 'yep' and a gist formulation (lines 10-15; Hoey, 2018). Another lapse follows. HYE then orients to LAN's question as the latter proposition, and starts sharing her



opinion on the teacher's performance (lines 17-23). It is also important to note that she is not responding to the prompt questions given by the teacher, but rather a general observation of the video that the group just watched, a question prompted by LAN. Therefore, LAN's original response mobilizing turn in line 5, with speaker allocation and epistemically recipient-tilted question design, successfully draws out other members' acknowledgement token and formulation, and their own response to the discussion prompt that progresses the larger activity.

### **Solution 2: "any other"/"what else" interrogative**

It has been previously established that interrogative morphosyntax mobilizes a response from other interlocutors. In this study, the particular construction – “any other” or “some other” interrogatives were frequently used at the post-lapse position to mobilize members' participation. More specifically, ‘any other’ construction was used 17 times, ‘some other’ 2 times, and “some further/any further” 2 times. Prior research has shown that negatively polarized yes/no questions display a stance indicating that the statement in the question is improbable and prefers a negative response<sup>5</sup> (Heritage & Raymond, 2021). In this dataset, however, ‘any other’ was much more frequently used and drew out responses from other members successfully.

---

<sup>5</sup> i “Any other” Example Heritage & Raymond, 2021, p.48

1 DOC: An' do you have any other medical problems?  
 2 PAT: Uh: no.  
 3 (7.0)  
 4 DOC: No heart disease,  
 5 PAT: #Hah:.# ((cough))  
 6 PAT: No.  
 7 (1.3)  
 8 DOC: Any lung disease as far as you know:.,  
 9 PAT: No.  
 10 (.)  
 11 PAT: Not that I know of.  
 12 (.)  
 13 DOC: Any diabetes,  
 14 PAT: No.  
 15 DOC: Have you ever had (uh) surgery?  
 16 (0.5)  
 17 PAT: I've had four surgeries on my left knee:.

The doctor sets up the question asking whether the patient has “any other” problems as the patient has already reported problems that s/he did have. The question hence indicates that the doctor is expecting a ‘no’ response and the patient provides so. The next four questions, based on the knowledge that the doctor now has (i.e.,

Excerpt 5.6 shows an example of using ‘some further’ to draw more responses from other group members. Prior to the excerpt, the group was asked to read a few articles before discussing the strategies mentioned in the articles regarding giving students feedback after student responses. Before reading the article, LIA has already shared his thoughts about giving students feedback in general. Then the group starts reading, during which everyone stays quiet.

Excerpt 5.6 some further idea?

1 \*MUS: i- i think liangci just gave a really good point  
 2 >i mean< when students have the wrong answers,  
 3 a::nd maybe we should give som- some hints  
 4 and maybe restate the answer,  
 5 >re- restate the question< and make it clear,  
 6 (1.0)  
 7 and encourage student to (0.7) try another ti:me.  
 8 (7.5)  
 9 \*LIA: you have some further idea?  
 10 (3.7)  
 11 \*MUS: u:::m (2.0) so in the article there’s another  
 12 skill that when one student gives the wrong answer,  
 13 and maybe we can ask the other students in the  
 14 classroom to help him to complete the answer.  
 15 right?  
 16 \*LIA: yeah.

MUS answers the prompt question by referring back to what LIA has shared prior to reading the article and expands on his response (lines 1-7). There are no sequence closing thirds

---

there are no other medical problems), all display that the doctor believes a ‘yes’ response is improbable. The four questions are all negative polarized, “no heart disease”, “any lung disease”, “any diabetes”, “have you ever...”.

that follow; instead, a lengthy lapse ensues (line 11). LIA uses a positive polarized yes/no interrogative “you have some further idea?” with a rising intonation (Hayano, 2012), drawing more of MUS’s response to the question.

Excerpt 5.7, on the other hand, shows an example of JIE using “any other” interrogative in two instances at the post-lapse position. The activity asks students to discuss a video of classroom interaction, specifically focusing on IRF (initiation – response - feedback). The excerpt captures the part where the students are identifying feedback turns by the teacher. JIE is doing the screensharing.

Excerpt 5.7 any other interrogative

1        \*JIE: °these three lines°  
 2        \*jie: (*plays the video*)  
 3        \*MUS: [°°ah°°  
 4        \*mus: l (*nods*)  
 5                (1.1)  
 6        \*JIE: mm  
 7                (2.0)  
 8        \*JIE: yeah.  
 9                (1.8)  
 10       \*JIE: is there any other kinds of response here?  
 11                (10.9)  
 12       \*BOL: you mean feedback. right?  
 13       \*JIE: right. feedback. from the (.) teacher.  
 14                (4.7)  
 15       \*BOL: °°feedback°°  
 16                (5.3)  
 17       \*BOL: i think line three seven nine,  
 18                interaction omitted, five minutes later

19 \*JIE: pay MORE attention to the to the answer to the  
 20 following materials.  
 21 (2.1)  
 22 \*MUS: YEAH. yeah.  
 23 \*JIE: like something like uh implication (1.0) from the teacher.  
 24 (0.9)  
 25 \*BOL: mm hm  
 26 ↑ (13.4)  
 27 \*jie: l(*scrolling through the transcript*)  
 28 is there any other kind of respon- feedback  
 29 from the tutor that we should (5.0) we should °notice°?  
 30 (4.5)  
 31 \*MUS: sometimes the teacher give the feedback by repeating

JIE has just finished sharing one instance he identified in the transcript and plays the video to show the instance (lines 1-2). This is followed by a sequence closing third acknowledgment token ‘ah’ with a head nod provided by MUS (lines 3-4). JIE acknowledges the closing with a ‘mm’ and a falling intonation ‘yeah’, accomplishing a sequence recompletion (Hoey, 2017) that solidifies the closing (lines 6-8). A lapse follows (lines 9). To push the interaction forward, JIE uses an “any other” interrogative to draw other members’ responses which succeeded after a repair: BOL adds one more instance of feedback turn and shares it with the group (lines 10-17). The sharing and further discussion of it are omitted.

Five minutes later, JIE is sharing his opinion on another instance of feedback turn the group identifies and receives the agreement tokens and acknowledgment tokens from both MUS (line 22) and BOL (line 25). A lengthy lapse follows, during which JIE scrolls through the transcript up and down (lines 26-27). This indicates that even though the current sequence has

ended, he is not ready to move to the next discussion question yet. He then uses another “any other” interrogative, successfully drawing a response from MUS.

It is clear from this excerpt that JIE is not using “any other” as a pre-closing indicator and the question does not prefer a negative response in the group activity, indicated from JIE’s non-verbal behavior. Rather, using it at the post-lapse position, he aims to draw more responses from the group and in so doing progresses the sequence further.

### **Deviant Case**

The abovementioned mobilization practices work very effectively at the post-lapse position. Among all the data collected, there is only one case that these two practices – recipient-tilted questions and ‘any other/some other’ interrogative failed to mobilize a response, shown in Excerpt 5.8. Among the group members, only LEN has her camera on while the rest three members does not. LEN uses both practices identified above, but it is still difficult to hold other members accountable to respond when they all have the cameras off (shown in Figure 7). The class is still working on the addressing misunderstanding module. In this particular excerpt, the group is asked to identify at least one linguistic resource and one non-linguistic resource that the students use to display their misunderstanding as well as the linguistic and non-linguistic resources that the teacher uses to address students’ misunderstandings after watching a clip of a classroom interaction accompanied by the transcript.

Excerpt 5.8 Mobilization fails

On camera: \*LEN. \*TEA; Off camera: #CHU, #HYE, #AVA

- 1       \*CHU and i ↑think the teacher address students
- 2               misunderstanding by pointing out ...
- 3               (omit 4 lines)... maybe in a place. yeah.

4 (33.2) / {1}

5 \*CHU: do you notice anywhere uh or how the teacher

6 use linguistic (0.9) uh method?

7 (1.0)

8 linguistic resources?

9 (30.2)

10 \*CHU: (*mute himself*)

11 (2:03:09)

12 \*TEA: how was your: sorry to interrupt your discussion

13 how was your (0.9) findings so far

14 (4.3)

15 \*CHU: i also find that students' misunderstanding ...

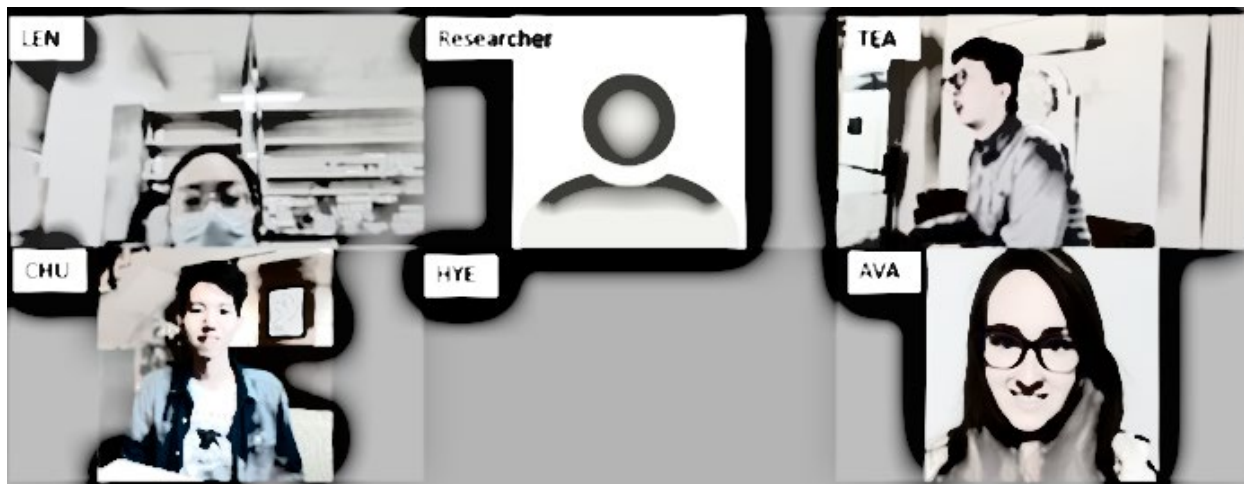


Figure 7: Group layout

The excerpt begins with CHU sharing his response, and his TCU ends with a falling intonation, marking the end of his delivery of the turn, followed by a sequence recompletion 'yeah' with a falling intonation (lines 1-3). A half-minute lapse follows, halting the progression of the interaction. At this point, among all the student members, only LEN has her camera on but is muted. The teacher also has his camera on but seems to be not paying attention to the ongoing

discussion<sup>6</sup>. Generally, teacher's presence incentivizes students to talk, expressing their concerns or doubts or explaining their reasonings (Dragnic-Cindric et al., 2018; Fagan, 2019). In this excerpt, however, it is only CHU who takes the lead of the interaction and responds to the discussion questions.

Without other members' agreement or acknowledgement, CHU chooses to mobilize other member's responses by employing multiple resources at the same time (lines 5-6). The mobilizing turn uses interrogative syntax, rising intonation, and speaker selection. Upon receiving no response (line 21), he self-repairs the "linguistic method" to "linguistic resource" in order to be more precise, and still uses a rising intonation. The mobilization fails this time and another half-minute silence follows (line 23). CHU eventually gives up and mutes himself.

For about two minutes, the whole group stays muted and no one talks until the teacher asks a question about what they have found. It is still CHU who responds to the teacher and the discussion gets to continue for a short while and other members still do not participate. In online group discussion, it is even more difficult to engage other members for the lack of visual access of interlocutors and the use of gaze.

### Summary

The chapter presents two main findings: firstly, it identifies how a pause in progressivity can occur after sequence-closing-thirds. This lapse can render the interaction vulnerable to halting. Secondly, the chapter outlines two practices that students employ at the post-lapse position to advance the sequences. These include an interrogative with a recipient-titled epistemicity and 'any other' or 'some other' formatted interrogatives. The findings first highlight

---

<sup>6</sup> The teacher has a similar setup as MUS mentioned before. When he talks to the camera, he looks to his side, whereas he disengages when looking to his front.

the vulnerability of online synchronous group discussions due to long gaps, mute microphones, and off-camera users. Students' use of response mobilization practices largely aligns with previous findings (Stivers & Rossano, 2010) but more specific.

In the next chapter, I address the interplay between epistemics and interactional progressivity in online group discussion. The chapter focuses on three different epistemic relations among the group members, i.e., one or more members have a higher epistemic status, all members have a low epistemic status, and lastly, two or more members have equally high epistemic status. Each epistemic relation affect how group discussion is halted and progressed.



## **Chapter 6 Epistemics and Progressivity**

This chapter answers the second aspect of the third research question: how do students resolve trouble or conflicts when the progression of the activity is stopped? The findings show that epistemic imbalance among group members creates a temporary halt in progression in interaction. The halt is managed differently by students with different epistemic relations. To be specific, when there is an epistemic imbalance between a more knowledgeable member and a less knowledgeable member, the more knowledgeable member fills the knowledge gap and progresses the interaction. When all members are not knowledgeable in a subject matter, this lack of knowledge creates an issue for the students to continue the discussion. Three practices are found that students use to regain progressivity: 1) passing over the information-seeking question; 2) negotiating epistemic relations; 3) borrowing institutional. Finally, when all members are knowledgeable and they are in disagreement, the interaction is halted. The resolution requires a negotiation or even a competition to decide who has more knowledge, and therefore the right to progress the interaction.

### **Epistemic imbalance between a more knowledgeable and a less knowledgeable member**

The first epistemic relation I show is among students who have different epistemic statuses. In these cases, when the interaction is halted by an epistemic imbalance, i.e., a knowledge gap emerging in interaction, among the students, the discussion is advanced by the individual who has more knowledge of the topic being discussed. Progressivity is achieved by the more knowledgeable student providing the necessary information to the student who lacks the information. This is the most typical and common situation in small group interaction, occurring 35 times in the data. Excerpt 6.1 illustrates this. The excerpt captures the very

beginning of a group discussion where members are asked to review the content of the prior week's lesson about IRF sequences.

Excerpt 6.1 I forgot what is IRF

- 1        \*LIA: so::: we need to answer the questions right?  
 2                    (0.6)
- 3        \*MEN: yeah.  
 4                    (6.0)
- 5        \*LIA: so what did you learn about the irf sequence last week.  
 6                    (1.5)
- 7                    uh (2.1) i also forgot what is @irf@.=
- 8        \*MEN: =@yeah@ so i is ʃinitial, r is response, f is ʃfeedback.  
 9        \*MOT:                            ʃinitiation    ʃfeedback
- 10       \*LIA: okay.  
 11                    (7.7)
- 12       \*MEN: so i think irf exists in ...

The knowledge gap, i.e., epistemic imbalance, occurs when LIA starts the discussion with a proposal for next action, reads the first discussion question, but then claims insufficient knowledge afterwards (lines 1-7). His lack of knowledge of what an IRF sequence is temporarily stops the progression of the discussion that he just initiated. Latching on to LIA's turn is MEN's provision of information, while MOT provides overlapping answers as well (lines 8-9). Their responses to LIA display their more knowledgeable stance toward the topic. LIA change-of-state token "okay" with a falling intonation confirms receipt of the information (line 10; Heritage, 1984). Once the epistemic imbalance that stops the progression is resolved, i.e., the knowledge gap is filled, this information seeking sequence is closed. The second pair part of LIA's original sequence initiator is provided by MEN and the sequence is progressed (line 12).

In other cases, epistemic imbalance that causes the halt in interaction is not resolved, but rather let go by the members. Progressivity is restored by members orienting to the larger activity goal and not attending to the emerging knowledge gap. This occurred 5 times in the data. In Excerpt 6.2, JIE, as a less knowledgeable member, requests information from LIA, but the knowledge gap is never resolved for him. Rather, progressivity is restored by letting the request for information go. The excerpt captures the moment after the group watches a classroom interaction video together and is asked to discuss the following questions: “Identify how student responds to the teacher’s initiations. Nonverbal? Verbal? Are there pauses and silences? When (after question, between responses etc.)?” JIE is doing the screenshare of the video with the transcript.

Excerpt 6.2: Which line?

1        \*JIE: okay so: (1.1) um (1.4) what's the question?  
 2                (0.4)  
 3                &huh  
 4                (2.5)  
 5                do you guys have the (1.1) have the ppt?  
 6                (*opens a new tab logging in course system*) / (2.3)  
 7                \*u:h\*  
 8                (*log in system to find ppt*) / (4.9)  
 9        \*LIA: .hh identify how student response to the teachers'  
 10                u:h (.) um interaction.= like maybe the answer is  
 11                uh how to .hh response to the teachers' ↑QUESTions.  
 12                (1.3)  
 13                u:m and >there's several sample<, nonverbal, verbal,  
 14                (1.4) and yeah.  
 15                (1.7)

16 \*LIA: 「so i- i notice uh like uvr- uh every the: (.) uh teacher  
 17 \*JIE: lum  
 18 \*LIA: question the student, there is a roughly point four to point  
 19 three second: (0.5) pending. right?  
 20 (1.2)  
 21 \*JIE: 「\*uh uh\* which- which line?  
 22 l(scroll transcript)  
 23 (1.1)  
 24 \*LIA: \*u:::h\* so ar- eh after every: the teacher question, the student,  
 25 (2.6)  
 26 \*JIE: uh 「so- sorry what- what.  
 27 l(scratch head)  
 28 (1.3)  
 29 \*LIA: >SO THE QUESTION is< how s- uh student response to the  
 30 teacher's uh uh °i-° (0.9) <<initiation>>.  
 31 (0.6)  
 32 \*MOT: yea:h. i think you are ri:ght. the students use silence  
 33 to response.  
 34 \*LIA: &hehe「he .hh  
 35 \*MOT: lto those question  
 36 \*JIE: u:h  
 37 \*LIA: °yeah°.  
 38 \*MOT: and then i think the teacher ask some (.) follow up, and easier  
 39 questions. (0.6) and the student just answer those (.) detailed  
 40 questions with (0.5) very (0.5) simple answers.  
 41 (0.6)  
 42 \*JIE: °mm hm°  
 43 (2.0)

44 \*JIE: uh keep so- keep the answer (0.7) simple. &huh. (0.7) (so they)  
 45 the students can response, (1.8) and (2.7) °what°  
 46 (6.9)  
 47 (°how to°) response  
 48 (0.7)  
 49 i think most response from the students (2.4) are ver- (0.4)  
 50 are verbal.

The discussion opens with JIE asking what the discussion questions are but receives no response (lines 1-4). He proceeds to log in to the course management system and attempts to locate the lesson slides (lines 5-8). Following JIE's visible struggle is LIA's reading of the first discussion question and a response to the question from himself (lines 9-11). LIA has made three attempts at responding to the first discussion question and positions himself as a more knowledgeable member in relation to the first discussion question, reflected in his speech delivery. His first candidate answer latches on immediately after the reading of the discussion question and ends with a falling intonation (lines 10-11). He then self selects and adds more about verbal and non-verbal "sample" (lines 13-14). The turn ending "yeah" with a falling intonation indicates his turn has come to an end (line 14; Wong, 2000). LIA self selects again and gives a more specific response, indicating that every time the teacher asks a question, there is a 0.3 to 0.4 second of silence. The turn ends with a tag question, "right" with a rising intonation, pursuing other members' responses (lines 16-19; Stivers & Rossano, 2010). However, no members acknowledge his response or give any feedback.

It is unclear whether JIE has understood LIA's response to the first discussion question as he does not give any feedback to LIA's response, but he does display a lower stance toward the subject being discussed as he requests more information, specifically, "which line" LIA is referring to while scrolling through the transcript on the screen (lines 21-22). LIA's answer to

JIE's clarification request is not grammatically complete, nor does the continuing intonation suggest otherwise (line 24). After a lengthy 2.6 seconds of silence, JIE initiates a repair while scratching his head, expressing his confusion (lines 26-27; Parvez, 2020). The epistemic imbalance here and the ensuing repair sequence temporarily halt the progression of the interaction.

MOT self selects as LIA reads the question again starting with a loud voice but has not started to resolve the repair yet. He first agrees with LIA's provided response and paraphrases it (lines 32-33; Glenn, 2022). It is unclear whether MOT's understanding does indeed reflect what LIA wants to express since LIA's follow-up turn treats MOT's paraphrase as a laughable (line 34). JIE, on the other hand, expresses uncertainty using an elongated "uh" because the repair trouble source (i.e., asking which line LIA is talking about) is still not resolved. At this point of the interaction, regardless of whether MOT's actual understanding matches LIA's response, both LIA and MOT are displaying a more knowledgeable stance while JIE still displays a less knowledgeable stance, and the epistemic imbalance that stops the progression has not been resolved.

MOT adds his own response to the discussion question; JIE agrees to it and paraphrases it (lines 37-44) which progresses the sequence. JIE's repair trouble source and the information request were neither addressed by LIA nor resolved. After a lengthy lapse (line 45), JIE, in a quiet voice, says, "how to response", referring to the first discussion question and hence orients the group back to the same question. He then provides his own response and progresses the sequence one more time. In this excerpt, the epistemic imbalance between LIA and JIE and the ensuing repair creates a temporary halt in progressivity. With MOT's involvement, the trouble source was simply let go and progressivity was restored.

In short, when there is an epistemic imbalance among group members that causes a halt in progressivity, the most typical case is for the more knowledgeable member to provide the information requested, fill the knowledge gap, and progress the sequence afterward. In other cases, the epistemic imbalances are tended to but not resolved. The sequence is progressed by letting the request to fill the knowledge gap go.

### **All members are not knowledgeable**

In this case, the focus of the discussion had to do with information that students were less familiar with, such as content that was just presented, new vocabulary, or unclear discussion prompts. They have equally low epistemic statuses toward the subject, and this lack of knowledge created issues for the students to continue the discussion. Three practices were found that students use to regain progressivity: 1) passing over the information-seeking question; 2) negotiating epistemic relations; 3) borrowing institutional authority.

#### **Practice 1: Passing over the information-seeking question**

First, similar to what was found previously in cases when students have incongruent epistemic relations, students also were found to let the request for information go when they share equally low epistemic status. This occurred 7 times in the dataset. In Excerpt 6.3, members encounter an unfamiliar phrase in the discussion prompt. After attempting to solve the problem to no avail, they simply let go of the attempt to fill the knowledge gap and continue the discussion. The progressivity is restored by orienting to the larger activity goal. This is illustrated in Excerpt 6.3.

In this excerpt, the students are conducting a group discussion in preparation for an upcoming assignment in which they will interview a more experienced teacher for teaching

advice. The group is expected to brainstorm interview questions together and list them on a shared Google Doc. On the shared document, there is a list of phrases capturing various aspects of teaching that the class has discussed. One of the phrases is “pragmatic appropriateness”, the meaning of which causes confusion among the group members. In the context of this activity, the phrase “pragmatic appropriateness” refers to using appropriate linguistic resources that fit the context that the speaker is in and the purpose that the speaker intends to achieve.

Excerpt 6.3 What is pragmatic appropriateness

1 \*MOT: (any) other ideas?  
 2 (1.9)  
 3 \*SON: ↑what is <pragmatic> >ap- ap- a-< appropriateness.  
 4 (1.7)  
 5 \*SON: do you guys know (.) what it (0.5) mean?  
 6 (1.6)  
 7 \*WUY: mmm::  
 8 (2.6)  
 9 \*WUY: <pragmatic>  
 10 \*WUY: (types) / (2.0)  
 11 \*SON: (types) / (0.9)  
 12 (14.8)  
 13 \*WUY: i'm not sure man, maybe it's about (0.5) just  
 14 saying some (0.8) friendly or (0.4) ↑proper words  
 15 \*MOT: lyeah maybe.  
 16 (1.7)  
 17 \*WUY: ↑xxx uh (.) good attitude? i'm not sure.  
 18 \*SON: lu:::h  
 19 (3.9)  
 20 \*WUY: but pragmatic means uh



21                   (2.5)

22    \*SON: yeah &hehe i just (.) i'm not (.) very (.) i'm not sure

23                   about this 「meaning.

24    \*WUY:                lyeah

25                   (1.8)

26    \*WUY: practical? i'm not sure.

27                   (2.8)

28                   in a dictionary. (0.9) it means practical.

29                   (6.4)

30    \*MOT: 「xxx

31    \*SON: luh i may ask about how the instructor get feedback from

32                   students like ...

The excerpt starts with MOT's use of "any other" interrogative orienting the group to the task (line 1), which is to come up with interview questions. SON asks the group about the meaning of "pragmatic appropriateness" (lines 3-5) which starts a side sequence that temporarily stops the progression of the larger activity. WUY's elongated "mm" indicates his uncertainty (Kärkkäinen, 2003). Both WUY and SON start typing on their computer, possibly checking the meaning of the phrase, and a lengthy 15 seconds of silence follows. All members are displaying a less knowledgeable stance.

Starting with an epistemic downgrader "I'm not sure", WUY's provides his candidate definition, "some friendly or proper words". MOT expresses agreement, also with a downgrade modifier "maybe" (lines 14-15; Kärkkäinen, 2003). WUY adds more with a rising intonation, and ends his definition with another "I'm not sure", still displaying a less knowledgeable stance (Heritage, 2012). A long silence follows (line 19). So far, all three members have expressed uncertainty about the definition of the phrase 'pragmatic appropriateness'. And failing to provide

a definition of the phrasing has stopped the side sequence from closing. What further delays the progression is WUY's casting doubt on his own candidate definition and offering an alternative definition (lines 20 and 26). SON aligns with WUY's epistemic position expressing his uncertainty using the same epistemic downgrader "I'm not sure". Citing the dictionary, WUY reconfirms his candidate definition being "practical", but receives no agreement or acknowledgment from the members (line 28). Another long silence follows (line 29), until SON provides an SPP, proffering questions to ask in the interview, to the original question "any other ideas" in line 1 and progresses the sequence (lines 31-32). In this case, all members simply let go of the knowledge gap. They abandon the side sequence about the definition of 'pragmatic appropriateness' and return to pursue the larger activity goal.

### **Practice 2: Negotiation of epistemic relation**

The second practice identified is negotiating epistemic relations among group members. This practice involves students making attempts to fill a knowledge gap emerging from the interaction when all members displayed a less knowledgeable stance. Interactants whose attempts made were accepted were interactionally positioned as the more knowledgeable member. They filled the knowledge gap and interaction progressed. In contrast, interaction remained halted when attempts were also explicitly or implicitly rejected, as will be shown in Excerpt 6.5. This practice is found to be used 7 times.

First, I show where attempts to fill the knowledge gap got accepted. In Excerpt 6.4, all members are less knowledgeable members. LAN's attempt to fill the knowledge gap is accepted and the interaction is progressed.

Excerpt 6.4: The long ruler

1       \*AVA: okay. i believe that's the end of the:: (.) section,  
2               (1.1)

3 \*LAN: yeah it's-  
 4 (2.2)  
 5 \*AVA: u::m (4.2) now i am not sure what we have to  
 6 do? (.) with these?  
 7 (5.1)  
 8 do you have any idea?  
 9 (7.0)  
 10 \*LAN: no. i- i think um on the direction it just says  
 11 to (0.5) point out interesting (1.1) uh (.) points.  
 12 (0.7)  
 13 so i think the long ruler is a really good point. &huh  
 14 (1.0)  
 15 \*AVA: ↑YEAH. and maybe in that part (discussion continues)

The group is asked to watch two videos and discuss a few questions, the first of which is “point out anything you find interesting”. The group already discussed the first video. The excerpt begins after they finish watching the second video on Ava’s screenshare. It opens when AVA stops playing the video on her screen, starts with a turn-initial okay, uttered with falling intonation, followed by a sequence pre-closing comment that the video has reached an end (line 1; Couper-Kuhlen, 2021). After a brief silence, LAN agrees but does not finish her turn and a longer silence follows (lines 3-4). Ava then claims insufficient knowledge (CIK; Sert & Walsh, 2013) about what they are supposed to do next (line 5). This statement stops the progression of the activity as a long silence ensues (line 7).

Receiving no response from her group mates (line 7), AVA issues an information seeking question by asking her group mates whether anyone else knows (line 8; also referred to as Epistemic Searching Sequence, ESS; Jakonen & Morton, 2015). Another long silence follows (line 9). LAN eventually responds to the turn but gives a negative response with a falling

intonation, and then proceeds to read out the discussion question (lines 10-12). Here, AVA's information seeking question positions her in a less knowledgeable stance and so does LAN's negative response (Rhys, 2016). The progressivity of the main activity is thus halted when two members both claim a less knowledgeable stance and cannot provide a response to progress the sequence. A gap follows (line 12).

What follows is LAN's attempt to fill the knowledge gap though she just claimed that she does not know what to do. LAN adds that "the long ruler is a really good point" which is something the group has briefly talked about after watching the first video. This receives a loud, high-pitched, falling intonation "yeah" from AVA, expressing her strong agreement, and the discussion continues. In this excerpt, two members both display less knowledgeable stances toward the knowledge gap as both claim insufficient knowledge about the subject matter. LAN's proposed proposition is accepted by AVA and the interaction is progressed.

Excerpt 6.5 presents a more complex case of a negotiation of epistemic relations when multiple attempts to fill the knowledge gap by different members were rejected, even when all members were less knowledgeable about the subject matter. An extended negotiation of who had more knowledge and was able to fill the knowledge gap occurred. MOT and JIE both try to resolve their group's confusion on a discussion question which halts the progression of the interaction. To do so, they negotiate their epistemic stance relative to each other. Both members' attempts to fill the knowledge gap are rejected multiple times by other members until one gets accepted and the interaction progresses. The excerpt captures a segment of a discussion during the review section at the beginning of a class. Students are asked to review the concept of the IRF from the last class. In this excerpt, the group is discussing the second question "how do you feel about giving students feedback".

Excerpt 6.5 How do you feel?

1 \*JIE: cannot °cannot log in°. can- can you check the powerpoint?  
 2 what's the se[cond-

3 \*MOT: l>(it seems like)< how do you feel about giving  
 4 students feedback.  
 5 (2.7)

6 \*JIE: 「°how do you feel about giving student feedback°.  
 8 l(looks up and furrows brows)  
 7 (1.6)  
 8 「u:m (5.7) my feeling is (0.8) u::h (3.8) °feedback°=  
 9 l(looks up)

10 \*MOT: =&hehe actually i- i think this question is not very specifiHc.  
 11 \*LIA: 「right &hehe  
 12 \*JIE: lyeah it's-  
 13 (1.1)

14 \*LIA: >like we cannot understand the instructor's questions<, &hehe  
 15 \*ALL: (smiling) / (2.5)  
 16 \*MOT: (mouthing something) / (0.9)

17 \*JIE: z- wh- what- (.) what does the (0.9) what is he asking  
 18 about. i mean (0.4) is he asking the feeling of me as an  
 19 obSERver. or (.) as a teacher.  
 20 (4.1)

21 \*MOT: °i don't know°.  
 22 \*MOT: (mouthing something about student feedback) / (2.7)  
 23 (6.3)

24 \*JIE: 「i-  
 25 \*MOT: lguys maybe: >the question is about< do you feel (.) confident?  
 26 or do you feel (1.0) 「something?  
 27 \*JIE: lmmm:::

28 (5.2)

29 \*MOT: or do you think it's a good idea? >to give student feedback<?

30 (0.9)

31 \*JIE: yeah. >of course it is a good idea<. 「because if (0.4) you don't

32 \*MOT: lyeah.

33 \*JIE: give feedback (.) to- (.) the student will not (0.6) like (.)

34 know: (0.9) how- how well they did

35 \*MOT: (nod) / (2.6)

36 (2.1)

37 \*JIE: mm but for my- (0.7) if I am a teacher, (0.7) i think (3.1) it

38 may be (1.3) hard for me to (0.6) give feedback to (1.0) every:

39 student because um: (3.6) i don- i don't know.

40 (22.6)

41 \*JIE: f- for example if i:, (.) like if i asked a question. (0.6) and

42 you answer me- answer me, (3.2) and- (1.3) what should i do

43 for the- (.) like (.) just giving feedback like (0.9) uh (1.0)

44 RIGHT or (7.6) mmf °i don't know° (0.8) it's very (.) &uhe

45 i think i need need more practice to be (.) comfortable (1.0)

46 to give feedback

47 (0.5)

48 \*MOT: yeah. (0.6) WELL we will have opportunity (.) later.

49 (1.7)

50 \*MOT: so do you make powerpoint (0.4) for present?

51 \*JIE: yeah.

The excerpt opens with JIE indicating difficulty locating the slides and the second discussion question, so MOT offers to provide the question (lines 1-4), which marks the beginning of this discussion sequence. The following stretch of interaction (lines 5-15) first shows that all members display a less knowledgeable stance towards the discussion question. JIE

utters a self-directed talk while looking up and furrows his brows, displaying his engagement with the task as well as difficulty in responding to the question (lines 6-7; Hall & Looeny, 2021). He starts to respond to the question but with much struggle, indicated by long pauses within the turn, elongated hesitation markers “um” and “uh”, and a nonverbal display of thinking – looking upwards (lines 8-9). Before JIE can finish his turn, MOT self selects and expresses his confusion toward the discussion question with the main concern being a “not very specific” prompt question (line 10) and thus affiliating with JIE. Both LIA and JIE agree with the assessment MOT puts forward at the same time (lines 11-12). The collective lack of understanding of the prompt question, as LIA verbalizes in line 14, stops the progression of the discussion.

What follows is JIE and MOT taking turns to try to fill the knowledge gap that stops the interaction. However, each trial is either explicitly or implicitly rejected by the other members. JIE first proposes two possible candidate understandings of the question (lines 17-19). No members acknowledge the candidate understandings and a lengthy silence follows. Without accepting JIE’s response, MOT claims insufficient knowledge (lines 20-21; Sert & Walsh, 2013). The non-acceptance stance can also be seen as MOT utters some inaudible self talk, indicating his engagement with the discussion question but not JIE’s response (line 22). Starting his turn with an “or”, again indicating MOT’s non-acceptance stance toward JIE’s response, he adds his own candidate understanding of the question (lines 25-29). His first trial, designed in a yes/no interrogative (lines 25-26) receives an elongated “mm” from JIE, indicating his reciprocal non-acceptance (line 28). His second trial is responded to from JIE, but is treated as an insufficient guess. JIE’s response is marked by “of course” and speed-up speech, marking MOT’s question as a matter-of-fact that does not require further discussion (lines 33-34; Lee, 2012).

All members at this moment still display an epistemically low stance toward the discussion question. Neither JIE nor MOT accepts each other's candidate guesses of what the discussion question means. No one is positioned as the more knowledgeable member and therefore does not have the sequential power to progress the sequence. The progressivity is still halted.

The exchange of ideas between JIE and MOT, however, does prompt JIE to further share his "feelings" about giving students feedback. The production is labored, filled with pauses in the turn, and ends with an incomplete clause (i.e., because ...) and an epistemic downgrader "I don't know" (lines 37-39). No members provide any verbal or non-verbal feedback to JIE's response and stay silent for almost half a minute (line 40). JIE self selects and continues elaborating on his thinking on giving students feedback in the future (lines 41-46). This time, his turn ends with a complete clause – "I think I need more practice to be comfortable to give feedback", which answers the original question "what do you feel about giving feedback". This leads to MOT's agreement and a closing of the sequence (line 48).

This excerpt captures a moment when all members display less knowledgeable stances. While both JIE and MOT endeavor to provide candidate guesses to resolve the trouble in order to regain progressivity, neither accept the others' multiple attempts in the process. Until one member's attempt is accepted by others and therefore is positioned as the more knowledgeable stance can the interaction be progressed.

### **Practice 3: Borrowing institutional authority**

The last practice that students use to regain progressivity is borrowing institutional authority. Institutional authority refers to the rights sectioned by the institutional to accomplish the institutional goal (Fisher, 1984). As mentioned previously, research in other institutional



settings has shown that the person with institutional authority has the right to progress the sequence when a halt in progressivity occurs (Nielsen, 2013). Students in small group discussions, however, share equally low level of institutional authority. In this case, it was found that students, through turn design, claimed stronger institutional authority than they had in order to resolve the issue that stops the progressivity of the discussion. This has occurred 5 times in the dataset.

This is exemplified in Excerpt 6.6. The task the three students, SON, MEN, and YEL, are discussing has to do with an upcoming assignment called Teaching Philosophy. To prepare to write their teaching philosophy, students are to share their answers to a list of questions shown in the slides. The answers they provide should push them to think about how they view teaching and help them formulate their philosophy.

Excerpt 6.6: A philosophical question

1      \*SON: so the purpose of education, <is to:>  
 2                 (2.4)  
 3      #MEN: is to::, &ha i don't know. &huh  
 4                 (6.8)  
 5      #MEN: it's like a philosophal (.) philosophy (1.1) ↑question.  
 6      #YEL:   Lmm.  
 7      #MEN: ◎°like°◎ (1.3) like (0.5) what's the meaning of the li:fe.  
 8                 (0.7)  
 9      #MEN: ☹huh☹  
 10                (1.1)  
 11     #MEN: what's the purpose of- (0.8) ↑anything  
 12     \*SON:   lb- but i ↑think the- the goal of of  
 13   these questions is to hel- help  
 14     \*SON: ourself uh (1.0) practice the: (.) e (.) portfolio.

15                   (0.5)

16   \*SON: so 「i- i think hermione <wants us to:> (0.4) like conduct

17   #MEN:     lyeah

18   \*SON: our speech (0.3) by (0.4) covering all these (0.4) question.

19                   (0.6)

20   #MEN: oh yea:h?

21                   (1.8)

22   \*SON: so let's put some (.) what we will say ☹in our v-v- video here☹.

23                   (1.0)

24   #MEN: oh yea:h. but i .hh i haven't got any answers for the-

25                   that first question.

26                   (0.8)

27   #MEN: i think maybe to inform people,

28                   (2.6)

29   \*SON: infor「m?

30   #MEN:       lcre- create better life &hehehehehe just kidding.

31                   (6.9)

32   \*SON: inform (.) i think inspire may- maybe (1.1) maybe a better

33                   word here,

34   #MEN: uh huh

MEN's complaint and claiming insufficient knowledge indicates her less knowledgeable stance on the discussion question and stop the progressivity of the discussion sequence. This excerpt opens with SON reading the first discussion question to the group (line 1). The turn is designed as a DIU (Koshik, 2002), which mobilizes a turn completion attempt from MEN. However, MEN abandons her response, and, instead, claims insufficient knowledge (line 3). A long silence (line 4) follows that stalls the progressivity of the discussion. The discussion is further halted by MEN's statement about the discussion question (i.e., the purpose of education)

which on one level offers a description of the nature of the question and on another serves as a joking complaint. By pointing out a fact that other members may relate to, she uses this descriptive statement to accomplish the action of complaining (Rossi, 2018). This can also be seen in her following turns, marked by a smiley voice “like”, her laughter “huh”, and the follow-ups “what’s the meaning of life” and “what’s the purpose of anything”, indicating that the question is difficult and general to respond to. The complaint is acknowledged by YEL (line 6). Both MEN and YEL display a less knowledgeable stance toward the information being sought by the discussion question.

SON, however, claims a higher stance in his following turns. To fill the knowledge gap, he borrows institutional authority from the overarching task itself and from the instructor, i.e., indicating an understanding of what the task expects and what the instructor wants, by stating, “the goal of the these questions is ... ” and “Hermione wants us to ...” (lines 12-14 and 16-18), emphasizing his turn with a slow-down manner. In other words, the authority is displayed in SON’s response that reflects a more knowledgeable stance toward what the instructor wants them to do in this institutional activity.

Not getting a strong agreement from MEN (line 20), SON then proposes a next action for the group to complete – instead of answering a rather general and philosophical question, answer with what to put in the e-portfolio video (line 22). In this way, SON re-orientes MEN to a new task for the activity even though the discussion question remains the same. MEN accepts SON’s positioning and explanation, returns to the original question with a newly adjusted rationalization (understanding what the task is about; Hellermann, 2008), and progresses the sequence (lines 27 and 30).

### **All members are knowledgeable**

The last epistemic relation is that all members, or at least two of the members, are knowledgeable. It was found that when multiple members had equally high epistemic status but they disagreed with what the other knows, the interaction was halted. Students argued extensively in order to decide who had the higher epistemic status in the group. The interaction was progressed until they decided on who has more knowledge. There are 3 occurrences in the dataset. Excerpt 6.7 presents an extensive exchange between JIE and BOL arguing against each other about what is the best way to teach and deliver content to students. As will be shown, they worked industriously to locate their area of expertise and epistemic domain so that they were able to decide who has the higher epistemic status. This argument in consequence halts the progression of the discussion for almost seven minutes. The following excerpt only shows the near-beginning of the argument.

Some relevant contextual information is due before the analysis. JIE, who studies computer science, argues that students can read the textbook before class, teachers should point out the main take-aways in class, and the majority of the class time should be spent on students asking specific questions. Detailed demonstration of calculation or proof is not helpful for students. On the other hand, BOL, who is in Mathematics major, believes that the best way to learn requires teacher's provision of detailed step-by-step walk-through of the learning content, such as proof procedure in math and writing an algorithm in computer science. Both have expressed their positions and are in disagreement prior to the excerpt.

Excerpt 6.7: Epistemic competition

1        \*BOL: yeah i agree. i think for (0.8) computer science  
 2                where (0.7) um (2.2) well like (0.9) sometimes the  
 3                subject is abou- >it's not about< the ↑proof °or something°

4           and sometimes (.) i think (.) a math course=  
5    \*JIE: =I- I- I- ↑actually i  
6    \*BOL:            ↓xxx like the main focus is about the proof  
7    \*JIE: actually i had a- i had a math bacheloral uh mathematic  
8           bacheloral degree, >but so< that's about my- what i was  
9           saying is about (.) uh (.) why I have (.) experience  
10           in my undergraduate.  
11   \*BOL: okay. so (0.9) so like what kind of (0.9) courses  
12           you're talking about. like maybe maybe  
13   \*JIE: mm (1.5) so I: (2.1) differential geometric was my  
14           ↑my (0.8) most (1.3) like how to say that  
15   \*BOL: ↓okay,  
16           (2.0)  
17   \*JIE: because i re- >i-i-i-< the- the professor was- i just  
18           huh ↑calculated (everything) on the blackboard &huh  
19   \*BOL:    ↓you- xxx  
20   \*BOL: you guys talk about the: the: (0.9) like smooth  
21           smooth manifolds like the course it's about smooth  
22           manifolds or like the: uh (0.4) geometry in eucl- euclidean  
23           space or three or something like or in more general  
24           setting or in a more,  
25           (1.3)  
26   \*JIE: it it was abou: i remember it was about smooth manifold  
27           something °like that°  
28   \*BOL: okay. >a smooth manifold course< i think that's like  
29           the (.) the ↑proof is really the important thing,  
30           because (0.9) i think (1.3) only that way you can  
31           really (0.4) like (1.1) mastered the- the idea

32           like you can really (1.5) like (1.3) i ↑THINK it's a  
 33           pretty high level generalization of (1.2) um so >i don't know<.  
 34           (1.5)

35 \*BOL: i feel like (1.4) but it's also depends on you want to  
 36           study math or not.  
 37           (1.3)

38           like if you only want to remember some main results (1.5) or,  
 39 \*JIE: uh if you just want uh to just just know the result and it  
 40           is enough for xxx

41 \*BOL: yeah it's enough. but if you wanna develop a theory that-so you  
 42           really want to comprehend the idea of smooth manifold, and then  
 43           you go to some other geometry class say romanian geometry, or: the  
 44           algebra or something. so that's that's a very important big step  
 45           uh first step for learning geometry, so i think i don't know it-

46 \*JIE: do you think it's important like to:=  
 47 \*BOL: =i mean i like geometry a lot it is my favorite subject i think  
 48 \*MUS: AH just quick question. Jiecun what's your major right now.  
 49           「are you studying-

50 \*JIE: lcomputer science. computer science. °computer 「science°  
 51 \*MUS: lah computer science. and your bach- bachelor degree  
 52           is mathematics?

53 \*JIE: yes.  
 54 \*MUS: yeah &huh huh

55 \*JIE: but I know i had (.) uh i only had some (0.7) very  
 56           basic (0.6) u:h (0.8) knowledge in mathematics i know  
 57           there are many higher leveled mathematics but i know i  
 58           know i'm just learned the very basic things but=-  
 59 \*BOL: =WE want to maybe we can exchange our like contact

60 \*MUS: and yeah it's very personal you know taste i think.  
 61 my- my- my bachelor degree is physics and ... (start talking about  
 62 learning experience with math)

Excerpt 6.7 starts with BOL agreeing with JIE's position, at least marked verbally at the beginning of his turn with "yeah I agree". The first half of the excerpt captures how BOL and JIE both claim the role of epistemic authority by displaying their access to the domain knowledge of Math. BOL first emphasizes that computer science, which is what JIE studies, does not require providing proof procedure, but Math does (lines 1-6). The turn does two actions: 1) partially agrees with JIE; and 2) delineates the epistemic domains they each possess. That is, JIE's epistemic domain lies in computer science and BOL's in Math. JIE, however, overlapping with BOL, reveals that he once was a Math major student as well and he is sharing his personal experience (lines 5-10). Doing so, he positions himself as one who has equal epistemic status with BOL on the domain of teaching and learning math. BOL then further pursues what courses JIE has taken during his undergraduate studies to further determine the level of epistemic access JIE has in the domain of math (lines 11-12). JIE provides the information and re-emphasized that he has personal experience in this matter, and therefore re-solidifying his position in the epistemic domain.

What follows is BOL using multiple information-seeking questions to further determine the level of access JIE has to the Math knowledge domain. BOL presses JIE about what exactly he has learned using jargons and JIE, again, provides the requested information (lines 20-26). Marked with a falling intonation "okay", BOL closes the questioning sequence and starts to take on the epistemic authority role again. He uses a rather definitive tone, using turn design such as "proof is really the important thing", "only that way you can really master the idea", and prosodically marking "proof" and "that". At the same time, he also uses a few epistemic

downgraders such as three “I think”s and an “I don’t know” marking the end of this turn (lines 28-34). Getting no response, he further adds that JIE’s way does not count as real learning (lines 35-38). BOL’s turn is not grammatically complete and is in a continuing intonation (line 38). JIE continues his turn and adds that knowing the results is enough, strengthening his own position (lines 39-40).

The third group member MUS joins in to help settle the epistemic battle by helping decide who has more epistemic access to the domain knowledge. He asks about JIE’s major right now and his undergraduate major, and JIE provides the information (lines 48-53). MUS responds with a “yeah” and a laughter (line 54). The interaction re-confirms JIE lower epistemic status in this particular part of the argument and JIE further re-affirms it as well (Holt, 2019). MUS provides a gist formulation (Barnes, 2007) as what counts as effective learning really is a personal taste.

In this excerpt, it has been shown that participants constantly orient to each other’s epistemic status when they are in disagreement. To be pragmatically polite, they may lower their epistemic stance using downgrade markers, but the person with higher status has the right to control the direction of the interaction. Even when MUS, who is not in the argument, joins in the debate and helps determine who is in the position of the epistemic authority. The argument goes quite extensively so I do not include the rest. Both JIE and BOL continue to engage in a heated debate and BOL’s persistent display of wider epistemic access to the domain knowledge in discussion eventually leads to JIE’s taking a lower position. The discussion is progressed afterward.



## Summary

In this chapter, how online synchronous discussions are managed by students with varying epistemic relations is shown. Specifically, I show how an epistemic imbalance, or knowledge gap, among members can temporarily halt the interaction. In cases where a more knowledgeable member is interacting with a less knowledgeable member, the former fills the knowledge gap and facilitates progress in the discussion. However, when all members lack knowledge on a particular topic, the progress of the discussion is impeded. Three common strategies employed by students to restore progressivity in these situations are: 1) passing over information-seeking questions; 2) negotiating their epistemic relations with one another; and 3) borrowing institutional authority. Lastly, I show that when all members possess knowledge on a topic but disagree, the interaction is brought to a halt. Resolving such a situation requires negotiation or even competition to determine which member possesses more knowledge and is therefore has the right to move the discussion forward.

The findings are largely in line with prior research findings on progressivity and epistemics. Previous studies have found that the person with more epistemic right and access can fill in the knowledge and progress the sequence (e.g., Leydon et al., 2013; Roberts, 2022). In this study, among students with relatively equal epistemic access to the content knowledge that they are learning, and equal institutional rights as they are all student, the interaction is progressed through a negotiation of their epistemic stance. The findings highlight the importance of understanding the epistemic relations among participants to better understand the interactions that they are conducting.

The next chapter summarizes the findings that address the research questions and discusses the findings in relation to research on progressivity in institutional settings, response

mobilization, and interplay between progressivity and epistemics. A discussion of the limitation of the study follows. Finally, the pedagogical implications are provided.

## Chapter 7 Discussion and Implications

This study set out to investigate the following questions:

- 1) How do students interactionally organize small group activities in a synchronous online environment?
- 2) How do they work towards the completion of the activity? Through what resources to forward the progression of the activity
- 3) How do students resolve trouble or conflicts when the progression of the activity is stopped?

In this chapter, I first summarize the findings that address the above research questions.

I then discuss the findings in relation to research on progressivity in institutional settings, response mobilization, and interplay between progressivity and epistemics. A discussion of the limitation of the study follows. Finally, the pedagogical implications are provided.

### Summary of the findings

How students interactionally organize small group activities in a synchronous online environment is revealed by illustrating the overall sequential organization of synchronous online small group discussions, shown in Chapter 4:

- 1) Prompt question as the sequence-initiating turn
- 2) One or multiple second pair parts
- 3) Agreement or acknowledgment token
- 4) Lapse
- 5) Prompt question as the next sequence initiating turn
  - a. reading the same question holds the progression to the next sequence

b. reading the next question progresses to the next topic

Small group discussion sessions are organized around the discussion prompts. They serve as the sequence-initiating turns that bookmark the beginning of each smaller individual sequence. Each smaller sequence then goes through the process of one or multiple participants providing aligning second-pair-parts to progress the sequence, followed by agreement or acknowledgment tokens to close the sequence. The lapse that follows re-completes and solidifies the closing. This whole process re-starts again as participants use the next discussion prompt to proceed to the next discussion sequence, and in so doing, progress the overall activity. In contrast, participants reading the same discussion can hold the progression to the next sequence and orient the group to continue providing other possible aligning SPPs.

In addition, due to the lack of shared space and the lack of visual access to others, screenshares become a reliable resource for students to organize their interactions as they serve as an essential reference point for students. In combination with the discussion prompts, students organize their interaction accordingly toward the institutional goal.

In the unfolding of the discussions, lapse after sequence closing is a vulnerable position to a halt in progressivity. The vulnerability highlights the importance of finding out how students get through these lapses, i.e., students' practices to maintain progressivity. The second research question is answered by revealing two practices that are used at moments between sequences to progress the larger activity: 1) speaker selection turn designed with recipient-tilted epistemic asymmetry; and 2) "any other" / "some other" interrogative.

Finally, to answer the third research question, I show how the epistemic relations among students in a group affect progressivity of the activity. When one student has higher epistemic status than other members or when one member displays a higher stance than other members,

interaction is progressed by this member providing the information needed as the aligning SPP to the sequence initiator. Furthermore, the epistemic relation among the participants is negotiated in interaction. That is, through interaction, they decide who has more knowledge to fill the knowledge gap and progress the sequence. When all members display a lower stance toward the subject matter being discussed, or when all members have lower epistemic status, who has more knowledge is negotiated through mini sequences of information requests and the provision of the requested information. Whoever provides the requested information is positioned as the person with a higher epistemic stance and progress the sequence.

### **Implications**

#### **Online synchronous small group discussion as a distinct form of institutional talk**

This study sheds light on an overlooked and special form of institutional talk - online synchronous small group discussion. To comprehend the specialty of online synchronous small group discussion, it is essential to understand what makes an interaction institutional. Research on institutional talk aims to understand how a particular institution is “produced, maintained, and transformed through routine interactional work” (Kasper & Wagner, 2014, p. 191). There are three key features of institutional talk: 1) an institutionally-relevant goal; 2) an institutionally-specific speech exchange system; and 3) a specific inferential framework constrained by the institutional context (Drew & Heritage, 1992; Heritage & Clayman, 2010). By examining these features of institutional talk, the findings provide the following four implications for research on institutional talk in the context of online synchronous small group discussions.

First, what makes this context special is that there is no power disparity among the student group members. Prior research on institutional talk, based on conversation analysis (CA),

has mostly focused on various contexts such as interviews, doctor-patient interactions, courtrooms, guided tours, classroom interactions, business meetings, etc. (Clayman, 2012; Fisher, 1984; Hall et al., in press; Maynard & Heritage, 2005; Mondada, 2013; Nielsen, 2009; van der Houwen et al., 2015). In these contexts, a person with institutional power such as the interviewer, doctor, judge, tour guide, teacher, or meeting chair, takes control of the interaction. The progression of the institutional activities depends on the actions taken by the person with institutional power, such as the interviewer asking questions, and the judge announcing who gets to speak next. In contrast, the shared power structure among the members of small group discussions creates a unique form of institutional talk.

Second, the findings on the overall structure of group discussion enhance the understanding of progressivity and its connection to the goal when investigating institutional talk. Progressivity is a mechanism that participants consistently orient to, regardless of the context (mundane or institutional) and participants (Stivers & Robinson, 2006). However, it can take different forms. Previous research has primarily focused on intra-sequential and intra-turn progressivity. The concept is embodied as each turn and each sequence moves towards its conclusion when interactants provide a SPP to an FPP. In contrast, the findings of this study reveal how participants work collaboratively to accomplish the institutional goal set by the instructors in the online discussion setting. Progressivity is embodied as participants use several main sequences to progress towards the conclusion of the entire activity while striving to achieve the institutional goal.

Third, students rely on discussion questions, an institutionally-powered textual object, to organize their speech exchange system, such as who gets to speak and when. The questions are institutionally powered because students have an obligation to complete the tasks required by the

instructor. Similar phenomena have been observed in small group meetings, such as business meetings and student counseling meetings, where an agenda guides the turn-taking system of a meeting (Asmuß & Svennevig, 2009; Boden, 1994; Deppermann et al., 2010; Ford, 2008; Svennevig, 2012). What sets small group discussion apart is that the meeting chair and the student counselor, along with the agenda, manage turn-taking, whereas students do not have the institutional power to do so. Instead, the questions function as the resources to manage the organization of the discussion sessions.

Fourth, the inferential framework plays a crucial role in determining how a particular turn is understood in relation to the action it accomplishes, as it depends on the institutional context in which it is used. For example, a common greeting such as "How are you?" is typically understood as a formulaic greeting in mundane interactions, and is expected to elicit a reciprocal response such as "Good, how are you?" rather than a genuine report of the responder's well-being (Pillet-Shore, 2018; Sacks, 1995;). However, in doctor-patient interactions, the same greeting from a doctor can be interpreted as an institutional inquiry regarding the patient's current condition (Gafaranga & Britten, 2005; Robinson, 2006; van der Laaken & Bannink, 2020). In small group discussions, turns that utilize discussion prompts in various forms are typically treated as sequence-initiating turns that start a discussion sequence, regardless of their format, whether interrogative, imperative, or declarative statement.

To illustrate, some sequence-initiating turns designed in interrogative or imperative format, suggesting an action to be taken, are effective in eliciting an immediate responsive action, such as "What did we talk about last week?" or "Let's come up with an answer for the first question." Nonetheless, some turns are designed as declarative statements that do not necessarily make a response conditionally relevant, such as "The third question is how were the

ESP workshops and how can you apply what you learned in teaching" (in Excerpt 4.6). Despite being a statement describing the third discussion question at face value, it is treated as a sequence-initiating turn that launches a discussion segment in this institutional setting.

### **Mobilizing Responses**

The second implication has to do with research on response mobilization (Stivers & Rossano, 2010). This study extends the findings on mobilization, which is identified in mundane talk, to an institutional context, specifically an online synchronous small group discussion. The practices students use to mobilize responses are consistent with the four resources identified by Stivers and Rossano (2010), which are interrogative lexico-morphosyntax, interrogative prosody, recipient-focused epistemicity, and speaker gaze, which is not available in this context. Contrary to the notion that initiating actions that make a responsive action conditionally relevant, such as information requests, invitations, and greetings, are response-relevant, Stivers and Rossano (2010) argue that it is actually the design of the action that holds interlocutors accountable for producing a responsive action by investigating the design features of actions that normally do not make a speech production point (SPP) relevant, such as assessments, noticings, and announcements. In other words, it is mainly the design of the action that mobilizes a response, not the action itself. The occurrences of a similar set of resources are used in vulnerable moments to elicit other members' participation. The findings thus add empirical strength to the line of research in response mobilization.

Meanwhile, the practices identified in this study also have their uniqueness due to the special interactional environment. Due to the lack of available resources such as eye gaze, speaker selection can be difficult. Research has shown that eye gaze is consequential to turn-taking, signaling the current speaker's turn is ending and allowing other speakers to self-select



(Duncan & Fiske, 1977; Heath, 1986; Kendon, 1967). Gaze can also be used to select the next speaker and serve as a non-verbal mobilizing resource before verbal pursuit is used (Rossano, 2006; Stivers & Rossano, 2010). For this particular reason, students are found to use direct nomination (i.e., calling out other interlocutor's name) to draw responses, which is not commonly found in mundane interaction.

### **Progressivity and Epistemics**

The third implication has to do with research on epistemic and progressivity. Previous research has shown that epistemics play a crucial role in interaction; it is “morally ordered” as interactants hold each other accountable for what they should know and what they display to know (Stivers et al., 2011, p. 3). The amount of knowledge and the level of access to a knowledge domain one has is correlated with their membership categories and the activity one is doing (Mondada, 2011). For example, if A has just come back from outside and B asks, “how’s the weather outside?”, A has the knowledge access to the domain knowledge this question seeks, and is held accountable for knowing this knowledge; failing to provide such knowledge can be treated as trouble. This is more so in institutional contexts. As mentioned before, in most cases, there is an expert and a layperson in institutional talks, e.g., a teacher and students. The distribution of knowledge and expertise between the two parties is presumed and is consequential to the accomplishment of the activity that they are doing, e.g., teaching. For instance, a teacher failing to answer a grammar question raised by a student in a language classroom would be treated as problematic and hence hinders the progressivity of an interaction. In other words, it is the discrepancy between the amount of knowledge one is presumed to have and the amount of knowledge one displays to have that creates a halt in progressivity.

In this study, similar to what has been discussed regarding relatively no power difference, students in a group also are presumed to have similar epistemic status as well. The question of who gets the right or has the information to progress the interaction becomes an intricate negotiation, and sometimes even a battle, as shown in Excerpt 6.7. The findings suggest that the general mechanism still applies. That is, the person with more knowledge and thus is able to fill the knowledge gap that halts the discussion has the right to progress the sequence.

### **Online interaction and Screenshare**

The fourth implication has to do with modalities of online interaction. Prior research on online interaction has extensively demonstrated the challenges associated with managing interaction due to the absence of a shared physical space. This problem is further compounded by the issue of "fractured indexicality" where referencing objects in virtual environments is shown to be difficult (Due & Licoppe, 2021). However, screenshare on Zoom has been found to be a solution to this issue by providing a shared and visible communal object that all group members can reference. In addition to this, texts, which often take the form of discussion questions in this study, also provide a textual anchor that enables groups to remain focused and coherent. Previous research has shown that texts have the ability to exert agency (Cooren, 2004) in influencing and shaping group interaction (Hall & Butler, 2017). Moreover, texts are used to negotiate the distribution of epistemic responsibility and turn allocation among group members (Hazel & Mortensen, 2014; Tanner et al., 2017). The study findings suggest that the text displayed on screenshare can achieve the same effect in online group discussions.

### **Limitations**

There are limitations of this study. Firstly, recording classroom interaction is made difficult by local law. Since the revision with the Pennsylvania Wiretapping Law (2010, 2012), which states that “Pennsylvania makes it a crime to intercept or record a telephone call or conversation unless all parties to the conversation consent”, recording a whole classroom is almost impossible. This law implies that researchers who intend to collect data through audio or video recordings of Zoom classes in Pennsylvania must obtain consent from all participants before recording any part of a class. This means that every single student in the class needs to provide consent, making the data collection process increasingly difficult.

This study, on the one hand, only includes breakout room recordings, with three to four students participating, which has made it easier to obtain consent from participating students, since obtaining four or even more consenting students is more probable than obtaining all students, in this case, eighteen students. On the other hand, the existence of the law still restricts the range of data that can be collected and may not reflect real classrooms. The composition of each group (who goes to which group) is often limited due to the limited number of participating students. For example, in Toby’s class, there are five participating students. I worked with Toby to ensure that these five students were always placed in the same discussion group, whereas these students would have been placed in different groups with different group members.

A second limitation is the lack of access to participants’ physical surroundings. The new mode of interaction, where everyone is sitting in front of their computer at their home or office, creates new challenges in the data collection process. In a traditional physical classroom, researchers could set up cameras at the front and back of the classroom to capture most of what

happens during teaching. For example, Figure 8 shows how researchers can set up cameras to record classroom interactions.



Figure 8: Teacher-cam and Student-cam (Looney & He, 2021)

In certain advanced settings, such as the ESOL Lab School at Portland State University, classrooms are equipped with six ceiling cameras and clip-on microphones (shown in Figure 9). A lab assistant in a separate room controls the zooming of different cameras, allowing for rich data collection, such as capturing what is written on the board, what students say during small group work, and what they write on their paper.

*Adult ESOL programs...*



*...inside a research lab.*



Figure 9: ESOL Lab School <http://www.labschool.pdx.edu/>

These types of data are crucial because interaction is complex, and CA develops, more modalities of interaction are taken into account to fully understand the work social members are doing Existing research in CA on social actions and its constituting practices has explored not only different aspects of verbal production but also various physical bodily interactions with

others and with the environment such as a person's hand guiding another (Kääntä & Piirainen-Marsh, 2013), smelling objects (Mondada, 2020), standing up and walking away (Broth & Mondada, 2013, 2019; Tuncer, 2015), physical position in relation to other members in the group and to objects in the environment (Skogmyr Marian & Kunitz, 2017; Hazel & Mortensen, 2014; Tanner et al., 2017).

In online interaction specifically, it has been found that multiple modalities are interwoven, such as video chats, textual chats, and other activities that the participants engage in, which can present challenges for some participants (Gibson, 2014; Rosenbaun et al., 2016). Therefore, understanding a person's interaction with the environment around them and their interaction with the video conferencing interface is crucial to understanding the actions they are accomplishing.

However, in this study, a limitation is the lack of data on what participants are doing in their own space. To fully understand what students are doing, recordings of their screens and surroundings are necessary. This includes capturing what objects are available around them, what they have on their screen, what they are reading, their mouse movements, and where they are gazing at on the screen. Furthermore, students may turn off their cameras during the breakout room discussions, which makes it impossible to observe their nonverbal communication or facial expressions. This lack of visual information may affect the accuracy of the data collected and the analysis of the data. These pieces of information would significantly strengthen the analyses conducted in this study.

For example, some students can be seen using multiple monitors during the discussions. They look away to the side at the position of sequence closing and look back to the camera when the next sequence starts. See Excerpt 4.7 as an example.

Excerpt 4.7 Agreement H1201G3-19:25

5 \*MOT: °yeah° >i think that's a very useful skill<.  
6 also i remember they talk about that (.) to  
7 encourage students more, like he's very close,  
8 (0.6)  
9 †BUT. °but°

10 \*WUY: lyea:h  
11 \*MEN: mm hm yea:h  
12 \*MOT: (6.2)/(head turn to side monitor)  
13 \*MEN: †and you can always rephrase the question to make  
14 \*mot: †(head turns back to main monitor)  
15 \*MEN: it more clear.  
16 (0.8)  
17 \*MOT: yeah  
18 (0.9)  
19 \*WUY: mm hm  
20 \*MOT: (head turns to side monitor again)  
21 (21.0)  
22 \*MOT: <what expressions can you use> to be clearer.  
23 \*mot: (turns back to the main monitor)

MOT's ongoing response to the discussion question meets agreement tokens from both WUY and MEN, which closes his response sequence. During the lapse (line 12), MOT turns his head to a monitor next to his main monitor. The moment MEN adds her post-expansion (line 13), he turns his head back, gives agreement, and turns his head away again as the post-expansion sequence is closed. After a long lapse, he reads the next discussion question while gazing at the side monitor, and turn his head back the moment he finishes reading. It can be reasonably

assumed that he has the PowerPoint slides with the discussion questions on the side monitor, but without the recordings collected, no claims can be made.

For future studies investigating synchronized online interactions, researchers may consider having participants show their home/office arraignment and having them install screen recording software to collect more data in order to render a more comprehensive analysis.

### **Pedagogical Recommendations**

Online education has received significant attention in research on learning and pedagogy, particularly in response to the global pandemic. However, synchronous video conferencing teaching and learning is a relatively new mode of education, and few empirical studies have addressed how to effectively teach in this mode (Moorhouse et al., 2021). Experts have advocated for increased teacher training in online teaching, including taking into account the advantages and limitations of different technological tools when designing pedagogical activities, teaching students how to use various learning tools, and striking a balance between designing engaging activities and ensuring high levels of effectiveness in teaching online (Legutke et al., 2006; Wang et al., 2010). The findings of this study suggest several recommendations for future teacher training in synchronous online teaching.

#### **Clearer Prompts**

The study's findings highlight the importance of training teachers to design discussion prompts carefully. Prior research on asynchronous online learning emphasizes the critical role of discussion question design in engaging students and creating intellectually and cognitively challenging work (Arnold & Ducate, 2006; Meyer, 2004). The same should apply to synchronous online teaching.

Firstly, the prompt needs to be clear in terms of word meaning. As illustrated in Excerpt 6.3, the phrase "pragmatically appropriate" was unclear to all members of the group, even after they looked up its meaning in the dictionary, causing a halt in their discussion's progression. Ultimately, they had to abandon the question and move on to other discussion questions to achieve the overall activity goal. Therefore, teachers should ensure that their prompts are unambiguous and readily comprehensible to all participants.

Secondly, the prompt needs to be clear regarding what exactly students need to do to complete the task. Hellermann (2007, 2008) states that the successful unfolding and progression of group work requires two things: 1) the group's collective orientation towards the task; 2) a collective understanding of what the task expects. The prompt question needs to be clear enough for students to understand what the task wants them to accomplish. For example, in Excerpt 6.5, the prompt question "how do you feel about giving student feedback?" was unclear to students. MOT expressed that "I don't think this question is very specific", and JIE concurred, stating "we can't understand the instructor's question." They further elaborated that the question could be asking whether they feel confident giving students feedback, how difficult giving students feedback is, or what they think about the feedback their teachers give. The range of possibilities of different meanings and ambiguity creates difficulties for students to reach a collective understanding of what the task wants them to do.

Thirdly, the prompt needs to reflect its relation to the overall goal. In other words, if the prompts reflect what the instructor hopes students will achieve after completing the task, they are more effective. For example, in Excerpt 6.6, MEN complains that the discussion prompt "the purpose of education is to..." is too "general" and "philosophical", and hence difficult to respond



to. SON's explanation of the e-portfolio's expectations successfully re-orientes how MEN views the prompt and mobilizes her response.

### **Assigning Specific Roles**

While not yet empirically tested, it is strongly recommended that teachers assign specific roles within group discussions to ensure a smooth and efficient progression of the activity (Brown et al., 2016). Such roles may include, but are not limited to, a group leader, a note-taker, and a designated debriefer. With clear role assignments, tasks can be completed in a timely and effective manner. Previous studies have also highlighted the importance of having a designated leader within a group, as this helps to ensure a fair and effective division of labor, increased engagement, and a higher quality of discussion (Kurth et al., 2002; Richmond & Striley, 1996).

The findings of this study provide further support for these recommendations, although the available data is somewhat limited. During the course of the semester, Toby began assigning a designated "screenshare person" within each group, as only a co-host can share their screen in his Zoom room (personal communication, October, 2020). These individuals were found to be more likely to use orienting practices to organize the group discussion, similar to the role of a chairperson in a business meeting (Svennevig, 2012).

### *Preparing Students with Linguistic Resources*

One of the most essential skills that students need to develop for success in their academic and professional careers is the ability to work effectively with others in small group discussions. Small group discussions are often utilized as a pedagogical tool to enhance learning outcomes, foster critical thinking, and promote active participation. However, to fully realize these benefits, students must learn how to collaborate with their peers and contribute constructively to group goals. It is therefore critical for students to develop skills in working

together and encouraging participation from other group members during small group discussions. The practices identified in Chapter 5 are especially important in online synchronous contexts. Students can learn to use the two response mobilizing practices to generate more discussion, particularly in the lapse position.

Preparing students for more engaging group work, and inviting participation from other members can lead to better learning outcomes. Henri and Rigault (1996) made a distinction between cooperation and collaboration in learning. Cooperation refers to students working individually and putting their work together whereas collaboration involves interactively working together through dialogue and sharing perspectives. Studies have found that collaboration better promotes learning but cooperation occurs much more frequently in online asynchronous group work (Hathorn & Ingram, 2002; Paulus, 2004). Synchronous online group work provides space for a more fluid and smooth interaction, but students also need to be equipped with the resources to achieve collaborative learning. The findings of the study provide such resources.

### **Summary**

This study highlights the importance of recognizing online synchronous small group discussion as a distinct form of institutional talk. By examining the key features of institutional talk, the study provides several implications for research on institutional talk in the context of online synchronous small group discussions. The shared power structure among the members of small group discussions creates a unique form of institutional talk, where progressivity is embodied as participants work collaboratively to accomplish the institutional goal set by the instructors. Moreover, students rely on discussion questions as institutionally-powered textual

objects to organize their speech exchange system, and the inferential framework plays a crucial role in determining how a particular turn is understood in relation to the action it accomplishes. These findings contribute to a deeper understanding of institutional talk in online small group discussions and provide a basis for further research in this area.

The study also contributes to the existing literature on response mobilization, epistemics, and online interaction by providing empirical evidence of the unique practices that are used in an online synchronous small group discussion. The findings suggest that the design of an action plays a crucial role in mobilizing responses, and that the distribution of knowledge and expertise between interactants is consequential to the accomplishment of the activity they are doing. Furthermore, screenshare and text-based discussion questions have been found to be effective in addressing some of the challenges associated with managing interaction in an online environment. Overall, these implications provide valuable insights into the complex nature of institutional interaction and the ways in which it is negotiated in an online setting.

Online education has gained immense popularity due to the pandemic, leading to synchronous video conferencing teaching becoming a new mode of education. However, there is limited empirical research on how to effectively teach in this mode. Therefore, teacher training is essential to design effective pedagogical activities, strike a balance between engaging activities and effectiveness, and teach students how to use different learning tools. The study recommends designing clear prompts for students, assigning specific roles within group discussions, and preparing students with linguistic resources for effective participation.

## References

- Ahern, T.C. (2008). CMC for language acquisition. In F. Zhang & B. Barber (Eds.), *Handbook of research on computer-enhanced language acquisition and learning* (pp. 295–306). Information Science Reference.
- Alaimo, P. J., Bean, J. C., Langenhan, J. M., & Nichols, L. (2009). Eliminating lab reports: A rhetorical approach for teaching the scientific paper in sophomore organic chemistry. *WAC Journal*, 20, 17–32.
- Aldrich, R. M., & Johansson, K. E. (2015). U.S. and Swedish student learning through online synchronous international interactions. *American Journal of Occupational Therapy*, 69 (Supplement\_2), 6912350010p1–6912350010p5.
- Allen, I. E., & Seaman, J. (2013). Online Nation: Five Years of Growth in Online Learning. Babson Survey Research Group. *The Solan Consortium*. Retrieved from <https://files.eric.ed.gov/fulltext/ED529699.pdf>
- Amato, C. H., & Amato, L. H. (2005). Enhancing student team effectiveness: application of Myers-Briggs personality assessment in business courses. *Journal of Marketing Education*, 27(1), 41–51.
- Archibald, M. M., Ambagtsheer, R. C., Casey, M. G., & Lawless, M. (2019). Using Zoom Videoconferencing for Qualitative Data Collection: Perceptions and Experiences of Researchers and Participants. *International Journal of Qualitative Methods*, 18, 1–18.
- Arends, R. (1997). *Classroom instruction and management*. McGraw-Hill Companies.
- Asterhan, C. S. C., & Schwarz, B. B. (2007). The effects of monological and dialogical argumentation on concept learning in evolutionary theory. *Journal of Educational Psychology*, 99, 626–639.

- Asterhan, C. S. C., & Schwarz, B. B. (2011). The role of argumentation and explanation in conceptual change: Indications from protocol analyses of peer-to-peer dialogue. *Cognitive Science*, *33*, 373–399.
- Asterhan, C. S. C., Schwarz, B. B. & Butler, R. (2009). Peer argumentation that supports conceptual learning: The role of individual achievement goals, goal instructions and gender. In *Proceedings of the Annual Meeting of the Cognitive Science Society* (pp. 1633–1638). UC Merced. <https://escholarship.org/uc/item/8q66r9cm>
- Asterhan, C. S. C., Schwarz, B. B., & Gil, J. (2012). Small-group, computer-mediated argumentation in middle-school classrooms: The effects of gender and different types of online teacher guidance. *British Journal of Educational Psychology*, *82*(3), 375–397.
- Balaman, U., & Sert, O. (2017). Development of L2 interactional resources for online collaborative task accomplishment. *Computer Assisted Language Learning*, *30*(7), 601–630.
- Barbour, M. K., & Reeves, T. C. (2009). The reality of virtual schools: a review of the literature. *Computers & Education*, *52*(2), 402–416.
- Barkley, E. F., Cross, K. P., & Major, C. H. (2005). *Collaborative learning techniques: A handbook for college faculty*. Jossey-Bass Publishers.
- Barnes, R. (2007). Formulations and the facilitation of common agreement in meetings talk. In *Text and Talk*, *27*(3), 273–296.
- Barron, B. (2003). When smart groups fail. *The Journal of Learning Science*, *12*(3), 307–359.
- Beach, W. A. (1993). Transitional regularities for ‘casual’“Okay” usages. *Journal of Pragmatics*, *19*(4), 325–352.

- Beeghly, D. G. (2005). It's about time: using electronic literature discussion groups with adult learners. *Journal of Adolescent and Adult Literacy*, 49(1), 12–21.
- Bender, T. (2003). *Discussion-based online teaching to enhance student learning*. Stylus.
- Bennett, J., Hogarth, S., Lubben, F., Campbell, B., & Robinson, A. (2010). Talking science: The research evidence on the use of small group discussions in science teaching. *International Journal of Science Education*, 32(1), 69–95.
- Bentley, D., & Watts, M. (1992). *Communicating in school science*. Falmer.
- Berge, Z. L. & Clark, T. A. (2005). *Virtual schools: planning for success*. Teachers College Press.
- Blake, R. (2000). Computer mediated communication: A window on L2 Spanish Interlanguage. *Language Learning & Technology*, 4(1), 120–136.
- Blatchford, P., Kutnick, P., Baines, E., & Galton, M. (2003). Toward a social pedagogy of classroom group work. *International Journal of Educational Research*, 39(1-2), 153–172.
- Blaxter, L., C. Hughes, & M. Tight. (1996). *How to research*. Open University Press.
- Bolden, G. B. (2006). Little words that matter: Discourse markers “so” and “oh” and the doing of other-attentiveness in social interaction. *Journal of Communication*, 56, 661–688.
- Bolden, G. B. (2009). Implementing incipient actions: The discourse marker “so” in English conversation. *Journal of Pragmatics*, 41(5), 974–998.
- Breen, M. (1987). Contemporary paradigms in syllabus design. *Language Teaching*, 20(3), 158–174.
- Brown, B., Schroeder, M., & Eaton, S. E. (2016). Designing synchronous online interactions and discussions. Paper presented at the IDEAS: Designing for Innovation Conference, University of Calgary, Calgary, Alberta, Canada.

- Bruffee, K. A. (1999). *Collaborative learning*. Johns Hopkins University Press.
- Carrillo, C., & Flores, M. A. (2020). COVID-19 and teacher education: a literature review of online teaching and learning practices. *European journal of Teacher Education*, 43(4), 466–487.
- Cavanaugh, C., & Blomeyer, R. L. (2007). *What works in K-12 online learning*. International Society for Technology in Education.
- CEAPP. (2014). Corpus of videos and accompanying transcripts from educational contexts. Unpublished raw data.
- Cheung, A. (2023). Language teaching during a pandemic: A case study of zoom use by a secondary ESL teacher in Hong Kong. *RELC journal*, 54(1), 55–70.
- Chevalier, F. H., & Clift, R. (2008). Unfinished turns in French conversation: Projectability, syntax and action. *Journal of Pragmatics*, 40(10), 1731–1752.
- Clayman, S. E., & Heritage, J. (2021). Conversation analysis and the study of sociohistorical change. *Research on Language and Social Interaction*, 54(2), 225–240.
- Clements, D. H., & Sarama, J. (2003). Young children and technology: What does the research say? *Young Children*, 56(6), 34–35.
- Cohen, E. G. (1994). Restructuring the classroom: Conditions for productive small groups. *Review of Educational Research*, 64, 1–35.
- Cooper, J. (1990). Cooperative learning and college teaching: tips from the trenches. *Teaching Professor*, 4(5), 1–2.
- Coughlan, P., & Duff, P. (1994). Same task, different activities: Analysis of SLA task from an activity theory perspective. In J.P. Lantolf & G. Appel (ed.), *Vygotskian approaches to second language research* (pp. 173–193). Ablex.

- Couper-Kuhlen, E. (2021). Language over time: Some old and new uses of OKAY in American English. *Interactional Linguistics*, 1(1), 33–63.
- Crosby, J. R., Monin, B., & Richardson, D. (2008). Where do we look during potentially offensive behavior? *Psychological Science*, 19(3), 226–228.
- Csernica, J., Hanyka, M., Hyde, D., Shooter, S., Toole, M., & Vigeant, M. (2002). *Practical guide to teamwork, version 1.1*. College of Engineering, Bucknell University.
- Darhower, M. (2002). Interactional features of synchronous computer-mediated communication in the intermediate L2 class: A sociocultural case study. *CALICO Journal*, 19(2), 249–277.
- Davis, B. G. (1993). *Tools for Teaching*. Jossey-Bass Inc.
- Deakin, H., & Wakefield, K. (2014). Skype interviewing: Reflections of two PhD researchers. *Qualitative Research*, 14, 603–616.
- Dragnic-Cindric, D., Lobczowski, N. G., Greene, J. A., & Murphy, P. K. (2018). Exploring teacher presence during social regulation of learning in science classrooms. *International Society of the Learning Sciences*. Retrieved from <https://repository.isls.org/bitstream/1/773/1/428.pdf>
- Drew, P. (2012). What drives sequences? *Research on Language and Social Interaction*, 45(1), 61–68.
- Drew, P. (2013). Turn design. In J. Sidnell & T. Stivers (Eds.), *The handbook of conversation analysis* (pp. 131–149). Blackwell Publishing.
- Due, B. L., & Licoppe, C. (2021). Video-mediated interaction (VMI): introduction to a special issue on the multimodal accomplishment of VMI institutional activities. *Social Interaction. Video-Based Studies of Human Sociality*, 3(3).



- Elgort, I., Smith, A. G., & Toland, J. (2008). Is wiki an effective platform for group course work?. *Australasian Journal of Educational Technology*, 24(2), 195–210.
- Ellis, R. A., Calvo, R., Levy, D., & Tan, K. (2004). Learning through discussions. *Higher Education Research and Development*, 23(1), 73–93.
- Evnikskaya, N., & Berger, E. (2017). Learners' multimodal displays of willingness to participate in classroom interaction in the L2 and CLIL contexts. *Classroom Discourse*, 8(1), 71–94.
- Fagan, D. (2019). Teacher embodied responsiveness to student displays of trouble within small-group activities. In J.K. Hall & S.D. Looney (eds.), *The Embodied Work of Teaching* (pp. 100–121). Multilingual Matters.
- Felder, R. M., & Brent, R. (2001). Effective strategies for cooperative learning. *Journal of Cooperation & Collaboration in College Teaching*, 10(2), 69–75.
- Fernández-García, M., & Martínez-Arbelaiz, A. (2002). Negotiation of meaning in nonnative speaker-nonnative speaker synchronous discussions. *CALICO Journal*, 19(2), 279–294.
- Fisher, S. (1984). Institutional authority and the structure of discourse. *Discourse Processes*, 7(2), 201–224.
- Fogarty, K., Augoustinos, M., & Kettler, L. (2013). Re-thinking rapport through the lens of progressivity in investigative interviews into child sexual abuse. *Discourse Studies*, 15(4), 395–420.
- Ford, C. E. (2008). *Women speaking up: Getting and using turns in workplace meetings*. Nalgrave Macmillan.
- Fox, B., & Heinemann, T. (2019). Telescoping responses to requests: Unpacking progressivity. *Discourse Studies*, 21(1), 38–66.

- Freeman, L., & Greenacre, L. (2011). An examination of socially destructive behaviors in group work. *Journal of Marketing Education*, 33(1), 5–17.
- Furstenberg, G. (1997). Teaching with technology: What is at stake? *ADFL Bulletin*, 28(3), 21–25.
- Gall, J. P., & M. D. Gall. (1990). Outcomes of the discussion method. In M. W. Wilen (Ed), *Teaching and learning through discussion: The theory, research and practice of the discussion method* (pp. 25–44). Charles C. Thomas.
- Gan, Z., Davison, C., & Hamp-Lyons, L. (2009). Topic negotiation in peer group oral assessment situations: A conversation analytic approach. *Applied Linguistics*, 30(3), 315–334.
- Garfinkel, H. (1988). *Forward to ethnomethodological studies* (Vol. 1). Routledge and Kegan Paul.
- Garfinkel, H. (1964). Studies of the routine grounds of everyday activities. *Social Problems*, 11(3), 225–250.
- Garfinkel, H. (1996). Ethnomethodology's program. *Social psychology quarterly*, 59(1), 5–21.
- Garside, C. (1996). Look who's talking: A comparison of lecture and group discussion teaching strategies in developing critical thinking skills. *Communication Education*, 45(3), 212–227.
- Glenn, P. (2022). “So you’re telling me...”: Paraphrasing (formulating), affective stance, and active listening. *International Journal of Listening*, 1-13.
- González-Lloret, M. (2020). Collaborative tasks for online language teaching. *Foreign Language Annals*, 53(2), 260–269.

- Goodwin, M. H., & Goodwin, C. (1986). Gesture and coparticipation in the activity of searching for a word. *Semiotica*, 62(1–2), 51–75.
- Goodwin, C. (1981). *Conversation organization: Interaction between speakers and hearers*. Academic Press.
- Goodwin, M. H., & Goodwin, C. (2012). Car talk: Integrating texts, bodies, and changing landscapes. *Semiotica*, 191, 257–286.
- Graham, C. R. (2006). Blended learning systems. In C. J. Bonk, & C. R. Graham (Eds.), *The handbook of blended learning: Global perspectives, local designs*. Pfeiffer.
- Hall, J. K., & Butler, E. R. (2017). The shifting role of a document in managing conflict and shaping the outcome of a small group meeting. *Text and Talk*, 37(5), 615–638.
- Hall, J. K., & Looney, S. D. (2021). The Role of Self-Talk in Downgrading a Teacher's Certainty About Grammar Matters. *TESOL Quarterly*, 55(1), 185-218.
- Halvorsen, K. (2016). Participation across distance: Claiming the floor in multiple location video meetings. *Journal of Applied Linguistics and Professional Practice*, 10(1), 45–67.
- Hammersley, M., & Atkinson, P. (2006). *Ethnography: Principles in practice* (2nd ed.). Routledge.
- Hampel, R. (2006). Rethinking task design for the digital age: A framework for language teaching and learning in a synchronous online environment. *ReCALL*, 18(1), 105–121.
- Hampel, R., & Hauck, M. (2006). Computer-mediated language learning: Making meaning in multimodal virtual learning spaces. *The JALT CALL Journal*, 2(2), 3–18
- Hampel, R., & Stickler, U. (2012). The use of videoconferencing to support multimodal interaction in an online language classroom. *ReCALL*, 24(2), 116–137.

- Hathorn, L. G., & Ingram, A. L. (2002a). Cooperation and collaboration using computer-mediated communication. *Journal of Educational Computing Research*, 26(3), 325–347.
- Hauck, M. and Youngs, B. L. (2008) Telecollaboration in multimodal environments: the impact on task design and learner interaction. *Computer Assisted Language Learning*, 21(2): 87–124.
- Hauck, M. (2007). Critical success factors in a TRIDEM exchange. *ReCALL*, 19(2), 202–223.
- Hauck, M. (2012). The enactment of task design in telecollaboration 2.0. In M. Thomas & H. Reinders (eds.), *Task-based language learning and teaching with technology* (pp. 197–217). Continuum.
- Hayano, K. (2012). Question design in conversation. In J. Sidnell & T. Stivers (Eds.), *The Handbook of Conversation Analysis* (pp. 395-414). Wiley-Blackwell.
- Heath, C., & Luff, P. (1992). Collaboration and control: Crisis management and multimedia technology in London Underground Line Control Rooms. *Computer Supported Cooperative Work*, 1(1), 69–94
- Hellermann, J. (2007). The development of practices for action in classroom dyadic interaction: Focus on task openings. *Modern Language Journal*, 91(1), 83–96.
- Hellermann, J. (2008). *Social Actions for Classroom Language Learning*. Multilingual Matters.
- Hellermann, J., & Doehler, S. P. (2010). On the contingent nature of language-learning tasks. *Classroom Discourse*, 1(1), 25–45.
- Heritage, J. (1984a). Ethnomethodology. In A. Giddens & J. Turner (Eds.), *Social theory today* (pp. 224–272). Stanford University Press.
- Heritage, J. (1984b). *Garfinkel and ethnomethodology*. Polity Press.

- Heritage, J. (1988). Explanations as accounts: A conversation analytic perspective. In C. Antaki (Ed.), *Understanding everyday explanation: A casebook of methods* (pp. 127–144). Sage.
- Heritage, J. (2004). Conversation Analysis and Institutional Talk. In K.L. Fitch & R.E. Sanders (eds.), *Handbook of language and social interaction* (pp. 103–147). Psychology Press.
- Heritage, J. (2007). Intersubjectivity and progressivity in person (and place) reference, In T. Stiver & N.J. Enfield (eds.), *Person Reference in Interaction: Linguistic, Cultural and Social* (pp. 255–280). Cambridge, UK: Cambridge University Press.
- Heritage, J. (2012). Epistemics in action: Action formation and territories of knowledge. *Research on Language & Social Interaction*, 45(1), 1–29.
- Heritage, J. (2013): Action formation and its epistemic (and other) backgrounds. *Discourse Studies*, 15(5), 551–578.
- Heritage, J., & Atkinson, J. M. (1984). Transcript notation. *Text*, 13(2), 157–158.
- Hester, S., & Francis, D. (2000). Ethnomethodology and local educational order. In S. Hester & D. Francis (Eds.), *Local educational order* (pp. 1–19). John Benjamins.
- Hiebert, J., & Wearne, D. (1993). Instructional tasks, classroom discourse, and students' learning in second-grade arithmetic. *American Educational Research Journal*, 30(2), 393–425.
- Hjulstad, J. (2016). Practices of Organizing Built Space in Videoconference-mediated Interactions. *Research on Language and Social Interaction*, 49(4), 491–498.
- Hoey, E. M. (2015). Lapses: How people arrive at, and deal with, discontinuities in talk. *Research on Language and Social Interaction*, 48(4), 430–453.
- Hoey, E. M. (2017). Sequence recompletion: A practice for managing lapses in conversation. *Journal of Pragmatics*, 109, 47–63.

- Hoey, E. M. (2018). How Speakers Continue with Talk After a Lapse in Conversation. *Research on Language and Social Interaction*, 51(3), 329–346.
- Holt, E. (2019). Conversation analysis and laughter. In C. A. Chapelle & S. Sauro (Eds.), *The Concise Encyclopedia of Applied Linguistics* (pp. 1-6). Wiley-Blackwell.
- Hu, P. J. H., & Hui, W. (2012). Examining the role of learning engagement in technology-mediated learning and its effects on learning effectiveness and satisfaction. *Decision support systems*, 53(4), 782–792.
- Hudson, T. M., Knight, V., & Collins, B. C. (2012). Perceived effectiveness of web conferencing software in the digital environment to deliver a graduate course in applied behavior analysis. *Rural Special Education Quarterly*, 31(2), 27–39.
- Hung, W. (2006). The 3C3R model: A conceptual framework for designing problems in PBL. *Interdisciplinary Journal of Problem-based Learning*, 1(1), 55–77.
- Hung, W. (2009). The 9-step problem design process for problem-based learning: Application of the 3C3R model. *Educational Research Review*, 4(2), 118–141.
- Hung, W., Jonassen, D. H., & Liu, R. (2008). Problem-based learning. In D. Jonassen, M.J. Spector, M. Driscoll, M.D. Merrill, J. van Merriënboer, & M.P. Driscoll (Eds.), *Handbook of research on educational communications and technology* (pp. 485–506). Routledge.
- Hutchby, I., & Wooffitt, R. (2008). *Conversation analysis*. Polity Press.
- Innes, R. B. (2006). What can learning science contribute to our understanding of the effectiveness of problem-based learning groups?. *Journal of Management Education*, 30(6), 751–764.

- Jakonen, T., & Morton, T. (2015). Epistemic search sequences in peer interaction in a content-based language classroom. *Applied Linguistics*, 36(1), 73–94.
- Jefferson, G. (1983). Notes on a possible metric which provides for a 'Standard Maximum' silence of approximately one second in conversation. *Tilburg Papers in Language and Literature*, 42, 1–83.
- Jefferson, G. (2004). Glossary of transcript symbols with an introduction. In G.H. Lerner (Ed.), *Conversation analysis: Studies from the first generation* (pp. 13–31). Amsterdam: John Benjamins.
- Jepson, K. (2005) Conversations – and negotiated interaction – in text and voice chat rooms. *Language Learning and Technology*, 9(3), 79–98.
- Johnson, D. W., Johnson, R. T., & Smith, K. A. (1991). *Cooperative Learning: Increasing College Faculty Instructional Productivity*. ASHE-FRIC Higher Education Report No.4. Washington, D.C.: School of Education and Human Development, George Washington University.
- Johnson, D.W., & Johnson, F. P. (2009). *Joining together: Group theory and group skills* (9th ed.). Allyn and Bacon.
- Jung, H., & Brady, C. (2020). Maintaining rich dialogic interactions in the transition to synchronous online learning. *Information and Learning Science*, 121(5–6), 381–390.
- Kääntä, L., (2010). Teacher turn-allocation and repair practices in classroom interaction: A multisemiotic perspective. (Ph.D. thesis), University of Jyväskylä, Finland.
- Kärkkäinen, E. (2003). *Epistemic Stance in English Conversation: A Description of Its Interactional Functions, with a Focus on “I think”*. John Benjamins.

- Kasper, G. (2004). Participant orientations in German conversation-for-learning. *Modern Language Journal*, 88(4), 551–567.
- Kasper, G. (2009). Locating cognition in second language interaction and learning: Inside the skull or in public view?. *International Review of Applied Linguistics in Language Teaching*, 47, 11–36.
- Kimmel, K., & Volet, S. (2012). University students' perceptions of and attitudes towards culturally diverse group work: Does context matter?. *Journal of Studies in International Education*, 16(2), 157–181.
- Kohnke, L., & Moorhouse, B. L. (2020). Facilitating Synchronous Online Language Learning through Zoom. *RELC Journal*. 0(0), 1–6.
- Koshik, I. (2002). Designedly incomplete utterances: A pedagogical practice for eliciting knowledge displays in error correction sequences. *Research on Language and Social Interaction*, 35(3), 277–309.
- Kunitz, S. (2018). Collaborative attention work on gender agreement in Italian as a foreign language. *The Modern Language Journal*, 102, 64-81.
- Kunitz, S., & Skogmyr Marian, K. S. (2017). Tracking immanent language learning behavior over time in task-based classroom work. *TESOL Quarterly*, 51(3), 507–535.
- Kurek, M., & Müller-Hartmann, A. (2017). Task design for telecollaborative exchanges: In search of new criteria. *System*, 64, 7–20.
- Kuroshima, S. (2010). Another look at the service encounter: Progressivity, intersubjectivity, and trust in a Japanese sushi restaurant. *Journal of Pragmatics*, 42(3), 856–869.
- Lapadat, J. C. (2000). Problematizing transcription: Purpose, paradigm and quality. *International journal of social research methodology*, 3(3), 203–219.



- Larson, B. E., & Keiper, T. A. (2002). Classroom discussion and threaded electronic discussion: Learning in two arenas. *Contemporary Issues in Technology and Teacher Education*, 2(1), 45–62.
- LeCompte, M. D., & Goetz, J. P. (1982). Problems of reliability and validity in ethnographic research. *Review of Educational Research*, 52, 31–60.
- Lee, L. (2001). Online interaction: Negotiation of meaning and strategies used among learners of Spanish. *ReCALL*, 13(2), 232–244.
- Lee, L. (2002). Synchronous online exchanges: A study of modification devices on non-native discourse. *System*, 30(3), 275–288
- Lee, L. (2016). Autonomous learning through task-based instruction in fully online language courses. *Language Learning & Technology*, 20(2), 81–97.
- Lee, J. (2017). Multimodal turn allocation in ESL peer group discussions. *Social Semiotics*, 27(5), 671–692.
- Lee, S. H. (2011). Responding at a higher level: Activity progressivity in calls for service. *Journal of Pragmatics*, 43(3), 904–917.
- Lee, S. H. (2012). Response design in conversation. In J. Sidnell & T. Stivers (Eds.), *The Handbook of Conversation Analysis* (pp. 438-457). Wiley-Blackwell.
- Lee, S. M. (2022). Factors affecting the quality of online learning in a task-based college course. *Foreign Language Annals*, 55(1), 116–134.
- Lerner, G. H. (1993). Collectivities in action: Establishing the relevance of conjoined participation in conversation. *Text-Interdisciplinary journal for the study of discourse*, 13(2), 213–246.

- Lerner, G. H. (2003). Selecting next speaker: The context-sensitive operation of a context-free organization. *Language in Society*, 32(2), 177–201.
- Levinson, S. C. (2006). On the human ‘interaction engine’. In N. J. Enfield & S. C. Levinson (Eds.), *Roots of human sociality: Culture, cognition, and interaction* (pp. 39–69). Berg.
- Levinson, S. C. (2013). Action formation and ascription. In T. Stivers & J. Sidnell (Eds.), *The handbook of conversation analysis* (pp. 103–130). Wiley-Blackwell.
- Leydon, G. M., Ekberg, K., & Drew, P. (2013). “How can I help?” Nurse call openings on a cancer helpline and implications for call progressivity. *Patient education and counseling*, 92(1), 23–30.
- Lindwall, O., & Lymer, G. (2008). The dark matter of lab work: Illuminating the negotiation of disciplined perception in mechanics. *Journal of the Learning Sciences*, 17(2), 180–224.
- Long, M. H., & Norris, J. (2004). Task-based teaching and assessment. In M. Byram (Ed.), *Routledge encyclopedia of language teaching and learning* (pp. 597–603). Routledge.
- Long, M. H. (2015). *Second language acquisition and task-based language teaching*. Wiley-Blackwell.
- Looney, S. D., & He, Y. (2021). Laughter and smiling: sequential resources for managing delayed and disaligning responses. *Classroom Discourse*, 12(4), 319–343.
- Lou, Y., Abrami, P. C., & d’Apollonia, S. (2001). Small group and individual learning with technology: A meta-analysis. *Review of Educational Research*, 71(3), 449–521.
- Loyens, S. M., Magda, J., & Rikers, R. M. (2008). Self-directed learning in problem-based learning and its relationships with self-regulated learning. *Educational psychology review*, 20, 411–427.

- Lyon, D. C., & Lagowski, J. J. (2008). Effectiveness of facilitating small-group learning in large classes. *Journal of Chemical Education*, 85(11), 1571–1576.
- Managing breakout room. (2023, March 14). Zoom, Retrieved April 2, 2023, from <https://support.zoom.us/hc/en-us/articles/206476313-Managing-breakout-rooms>
- Markaki, V., & Mondada, L. (2012). Embodied orientations towards co-participants in multinational meetings. *Discourse Studies*, 14(1), 31–52.
- Markee, N. (2000). *Conversation analysis*. Mahwah, NJ: Erlbaum.
- Markee, N. (2005). The organization of off-task talk in second language classrooms. In K. Richards & P. Seedhouse (Eds.), *Applying Conversation Analysis* (pp. 197–213). Palgrave Macmillan.
- Markee, N., & Kasper, G. (2004). Classroom talks: Introduction to the special issue. *Modern Language Journal*, 88, 491–500.
- Mayer, G., Lingle, J., & Usselman, M. (2017). Experiences of advanced high school students in synchronous online recitations. *Journal of Educational Technology & Society*, 20(2), 1176–3647.
- McBrien, J. L., Jones, P., & Cheng, R. (2009). Virtual Spaces: Employing a Synchronous Online Classroom to Facilitate Student Engagement in Online Learning. *International Review of Research in Open and Distance Learning*, 10(3), 1–17.
- McCarthy, J. P., & Anderson, L. (2000). Active learning techniques versus traditional teaching styles: Two experiments from history and political science. *Innovative Higher Education*, 24(4), 279–294.
- McHoul, A. (1978). The organization of turns at formal talk in the classroom. *Language in Society*, 7, 183–213.

- Mehan, H. (1979). *Learning Lessons. Social Organization in the Classroom*. Harvard University Press.
- Mercer, N. (1996). The quality of talk in children's collaborative activity in the classroom. *Learning and Instruction, 6*, 359–377.
- Mondada, L., & Pekarek Doehler, S. (2005). Second language acquisition as situated practice: Task accomplishment in the French second language classroom. *Canadian modern language review, 61*(4), 461–490.
- Moorhouse, B. L. (2020). Adaptations to a face-to-face initial teacher education course ‘forced’ online due to the COVID-19 pandemic. *Journal of Education for Teaching, 46*(4), 609–611.
- Moorhouse, B. L., Li, Y., & Walsh, S. (2021). E-Classroom interactional competencies: mediating and assisting language learning during synchronous online lessons. *RELC Journal, 54*(1), 114–128.
- Mori, J. (2002). Task design, plan, and development of talk-in-interaction: An analysis of a small group activity in a Japanese language classroom. *Applied Linguistics, 23*(3), 323–347.
- Mori, J., & Hasegawa, A. (2009). Doing being a foreign language learner in a classroom: Embodiment of cognitive states as social events. *International Review of Applied Linguistics in Language Teaching, 47*(1), 65–94.
- Mortensen, K. (2008). Selecting next speaker in the second language classroom: how to find a willing next speaker in planned activities. *Journal of Applied Linguistics, 5*(1), 55–79.
- Muntigl, P. (2013). Resistance in couples counselling: Sequences of talk that disrupt progressivity and promote disaffiliation. *Journal of Pragmatics, 49*(1), 18–37.

- Nassaji, H., & Wells, G. (2000). What's the use of "Triadic Dialogue"? An investigation of teacher-student interaction. *Applied Linguistics*, 21, 376–406.
- Navarro, J. (2009, November 3). The lips don't lie. *Psychology Today*.  
<https://www.psychologytoday.com/us/blog/spycatcher/200911/the-lips-dont-lie>
- Nielsen, M. F. (2009). Interpretative management in business meetings: Understanding managers' interactional strategies through conversation analysis. *Journal of Business Communication*, 46, 23–56.
- Nielsen, M. F. (2013). "Stepping Stones" in Opening and Closing Department Meetings. *Journal of Business Communication*, 50(1), 34–67.
- Northey, G., Bucic, T., Chylinski, M., & Govind, R. (2015). Increasing student engagement using asynchronous learning. *Journal of Marketing Education*, 37(3), 171-180.
- Ohta, A. (2000). Rethinking recasts: A learner-centered examination of corrective feedback in the Japanese language classroom. In J.K. Hall & L.S. Verplaetse (eds.), *Second and Foreign Language Learning through Classroom Interaction* (pp. 47–72). Erlbaum.
- Oliver, K., Kellogg, S., & Patel, R. (2012). An investigation into reported differences between online foreign language instruction and other subject areas in a virtual school. *Calico Journal*, 29(2), 269–296.
- Örnberg Berglund, T. (2009). Multimodal student interaction online: An ecological perspective. *ReCALL*, 21(2), 186–205.
- Parvez, H. (2019, May 22). Body language: Scratching hair. *PsychMechanics*.  
<https://www.psychmechanics.com/body-language-scratching-hair/>

- Paulus, T. (2005). Collaboration or cooperation? Small group interactions in a synchronous educational environment. In T. S. Roberts (Ed.), *Computer-supported collaborative learning in higher education* (pp. 100–124). Idea Group.
- Payne, J. S. (2020). Developing L2 productive language skills online and the strategic use of instructional tools. *Foreign Language Annals*, 53(2), 243–249.
- Pike, K. L. (1967a). *Language in relation to a unified theory of the structure of human behavior* (2nd ed.). Mouton.
- Pomerantz, A., & Fehr, B. J. (2011). Conversation analysis: An approach to the analysis of social interaction. In T. van Dijk (Ed.), *Discourse Studies: A Multidisciplinary Approach* (pp. 165–190). SAGE.
- Pomerantz, A., Fehr, B. J., & Ende, J. (1997). When Supervising Physicians See Patients. *Human Communication Research*, 23(4), 589–615.
- Pomerantz, A. (1984). Agreeing and disagreeing with assessments: Some features of preferred/dispreferred turn shaped. In J.M. Atkinson & J. Heritage (Eds.), *Structures of social action: Studies in conversation analysis* (pp. 57–101). Cambridge University Press.
- Pomerantz, A., & Heritage, J. (2012). Preference. In J. Sidnell & T. Stivers (Eds.), *The handbook of conversation analysis* (pp. 210–228). Wiley-Blackwell Publishing.
- Psathas, G. (1995). “Talk and social structure” and “studies of work”. *Human studies*, 18(2–3), 139–155.
- Psathas, G., & Anderson, T. (1990). The “practices” of transcription in conversation analysis. *Semiotica*, 78(1/2), 75–99.

- Rendle-Short, J. (2000). When “okay” is okay in computer science seminar talk. *Australian Review of Applied Linguistics*, 22, 19–33.
- Rhys, C. S. (2016). Grammar and epistemic positioning: When assessment rules. *Research on Language and Social Interaction*, 49(3), 183-200.
- Rinekso, A. B., & Muslim, A. B. (2020). Synchronous online discussion: teaching English in higher education amidst the Covid-19 pandemic. *Journal of English Educators Society*, 5(2), 155–162.
- Roberts, T. (2022). Homework in a bi-national family: The mobilisation of others in resolving language-related epistemic issues. *Linguistics and Education*, 69, 101034.
- Roels, N., Ghidinelli, M., Cunningham, M., & Bilici, M. (2021). What are learner and instructor preferences for group size and composition for a series of synchronous online case discussions for upper extremity trauma surgeons?. *Journal of European CME*, 10(1), 1–9.
- Roseth, C. J., Johnson, D. W., & Johnson, R. T. (2008). Promoting early adolescents’ achievement and peer relationships: The effects of cooperative, competitive, and individualistic goal structures. *Psychological Bulletin*, 134(2), 223–246.
- Rossi, G. (2018). Composite Social Actions: The Case of Factual Declaratives in Everyday Interaction. *Research on Language and Social Interaction*, 51(4), 379–397.
- Ruday, S. (2011). Expanding the possibilities of discussion: A strategic approach to using online discussion boards in the middle and high school English classroom. *Contemporary Issues in Technology and Teacher Education*, 11(4), 350–361.
- Sacks, H. (1984a). Notes on methodology. In J. M. Atkinson, & J. Heritage (Eds.), *Structures of social action: Studies in conversation analysis* (pp. 2–27). Cambridge University Press

- Sacks, H. (1984b). On doing 'being ordinary.' In J. M. Atkinson & J. Heritage (Eds.), *Structures of Social Action: Studies in Conversation Analysis* (pp. 413–429). Cambridge University Press.
- Sacks, H. (1992). *Lectures on Conversation* (Vol. 1; G. Jefferson, Ed.). Introduction by Emanuel A. Schegloff. Oxford: Blackwell.
- Sacks, H. (1995). *Lectures on Conversation* (Vol. 2; G. Jefferson, Ed.). Introduction by Emanuel A. Schegloff. Oxford: Blackwell.
- Sacks, H., Schegloff, E. A., & Jefferson, G. (1974). A simplest systematics for the organization of turn-taking for conversation. *Language*, 50, 696–735.
- Samuda, V., & Bygate, M. (2008). *Tasks in Second Language Learning*. Palgrave Macmillan.
- Schegloff, E. A. (1968). Sequencing in conversational openings. *American Anthropologist*, 70(6), 1075–1095.
- Schegloff, E. A. (1979). The relevance of repair for syntax-for-conversation. In T. Givon (ed.), *Discourse and syntax* (pp. 261–288). Academic Press.
- Schegloff, E. A. (1992). Introduction. In G. Jefferson (ed.) *Harvey Sacks: Lectures on Conversation* (Vol. 1) (pp. ix–lxii). Blackwell.
- Schegloff, E. A. (1996). Turn organization: One intersection of grammar and interaction. In E. Ochs, E. A. Schegloff, & S.A. Thompson (eds.), *Interaction and grammar* (pp. 52–133). Cambridge University Press.
- Schegloff, E. A. (2000). On turns' possible completion, more or less: Increments and trailoffs [Conference presentation]. 1st Euroconference on Interactional Linguistics, Spa, Belgium.



- Schegloff, E. A. (2006). Interaction: The infrastructure for social institutions, the natural ecological niche for language, and the arena in which culture is enacted. In N. J. Enfield & S. Levinson (Eds.), *Roots of human sociality: Culture, cognition and interaction* (pp. 70–96). Berg.
- Schegloff, E. A. (2006). Interaction: The Infrastructure for Social Institutions, the Natural Ecological Niche for Language, and the Arena in Which Culture is Enacted. In N.J. Enfield and S. C. Levinson (Eds.), *Roots of Human Sociality: Culture, cognition and interaction* (pp.). London: Berg.
- Schegloff, E. A. (2007). *A primer for conversation analysis: Sequence organization*. Cambridge, England: Cambridge University Press.
- Sacks, H., Schegloff, E. A., & Jefferson, G. (1974). A simplest systematics for the organization of turn-taking for conversation. *Language*, 50(4), 696–735.
- Schegloff, E. A., Jefferson, G., & Sacks, H. (1977). The preference for self-correction in the organization of repair in conversation. *Language*, 53(2), 361–382.
- Schleef, E. (2008). The “lecturer’s ok” revisited: changing discourse conventions and the influence of academic division. *American Speech*, 83(1), 62–84.
- Schmidt, H. G., & Moust, J. H. (2000). Factors affecting small-group tutorial learning: A review of research. In D. H. Evensen & C. E. Hmelo (eds.), *Problem-based learning: A research perspective on learning interactions* (pp. 19–52). Routledge.
- Schmidt, H. G., Van der Molen, H. T., Te Winkel, W. W., & Wijnen, W. H. (2009). Constructivist, problem-based learning does work: A meta-analysis of curricular comparisons involving a single medical school. *Educational psychologist*, 44(4), 227–249.

- Schutz, A. (1964). The well-informed citizen: An essay on the social distribution of knowledge. In A. Broderick (Ed.), *Collected papers (Vol. II): Studies in social theory* (pp. 120–134). Martinus Nijhoff.
- Scott, P., Castañeda, L., Quick, K., & Linney, J. (2009). Synchronous symmetrical support: A naturalistic study of live online peer-to-peer learning via software videoconferencing. *Interactive Learning Environments, 17*(2), 119–134.
- Seedhouse, P. (2005). “Task” as research construct. *Language Learning, 55*(3), 533–570.
- Seedhouse, P. (2008). Learning to talk the talk: Conversation analysis as a tool for induction of trainee teachers. In S. Garton & K. Richards (eds.), *Professional encounters in TESOL: Discourses of teachers in teaching* (pp. 42–57). Palgrave Macmillan.
- Sert, O., & Walsh, S. (2013). The interactional management of claims of insufficient knowledge in English language classrooms. *Language and Education, 27*(6), 542–565.
- Shachar, H., & Sharan, S. (1994). Talking, relating, and achieving: Effects of cooperative learning and whole-class instruction. *Cognition and Instruction, 12*(4), 313–353.
- Sharing your screen or desktop on Zoom. (2022, November 4). Zoom, Retrieved April 2, 2023, from <https://support.zoom.us/hc/en-us/articles/201362153-Sharing-your-screen-or-desktop-on-Zoom>
- Shen, C. Y., & Wu, C. H. (2011). An exploration of students’ participation, learning process, and learning outcomes in Web 2.0 computer supported collaborative learning. *International Journal of Online Pedagogy and Course Design (IJOPCD), 1*(2), 60–72.
- Sinclair, J. McH. and Coulthard, R. M. (1975). *Towards an Analysis of Discourse: The English Used by Teachers and Pupils*. Oxford University Press.

- Skehan, P. (2003). Focus on form, tasks and technology. *Computer Assisted Language Learning*, 16(5), 391–411.
- Skogmyr Marian, K., & Kunitz, S. (2017). “Well if we’re wrong it’s your fault”: Negotiating participation in the EFL classroom. *Revue Tranel*, 67, 49–77.
- Slavin, R. E. (1996). Research on cooperative learning and achievement: What we know, what we need to know. *Contemporary Educational Psychology*, 21(1), 43–69.
- Slavin, R. E. (2015). Cooperative learning and academic achievement: Why does groupwork work?. *Anales de Psicología/Annals of Psychology*, 31(3), 785–791.
- Smith, B. (2003a). Computer-mediated negotiated interaction: An expanded model. *The Modern Language Journal*, 87(1), 38–57.
- Smith, B. (2003). The use of communication strategies in computer-mediated communication. *System*, 31(1), 29–53.
- Sockalingam, N., & Schmidt, H. G. (2011). Characteristics of problems for problem-based learning: The students’ perspective. *Interdisciplinary Journal of Problem-Based Learning*, 5(1), 6–33.
- Speer, S. A., & Hutchby, I. (2003). From ethics to analytics: Aspects of participants' orientations to the presence and relevance of recording devices. *Sociology*, 37(2), 315–337.
- Plowman, L., & Stephen, C. (2003). A ‘benign addition’? Research on ICT and pre-school children. *Journal of Computer Assisted Learning*, 19(2), 149–164.
- Stickler, U., Batstone, C., Duensing, A., and Heins, B. (2007). Distant Classmates: speech and silence in online and telephone language tutorials. *European Journal of Open, Distance and E-Learning (EURODL)*. [http://www.eurodl.org/materials/contrib/2007/Stickler\\_Batstone\\_Duensing\\_Heins.html](http://www.eurodl.org/materials/contrib/2007/Stickler_Batstone_Duensing_Heins.html)

- Stickler, U. & Hampel, R. (2010) CyberDeutsch: Language production and user preferences in a Moodle virtual learning environment. *CALICO Journal*, 28(1), 49–73.
- Stivers, T. (2001). Negotiating who presents the problem: Next speaker selection in pediatric encounters. *Journal of Communication*, 51(2), 252–282.
- Stivers, T. (2008). Stance, alignment, and affiliation during storytelling: When nodding is a token of affiliation. *Research on Language and Social Interaction*, 41(1), 31–57.
- Stivers, T. (2012). Sequence organization. In J. Sidnell & T. Stivers (Eds.), *The handbook of conversation analysis* (pp. 191–209). Wiley–Blackwell.
- Stivers, T. (2015). Coding social interaction: A heretical approach in conversation analysis?. *Research on Language and Social Interaction*, 48(1), 1–19.
- Stivers, T., & Robinson, J. D. (2006). A preference for progressivity in interaction. *Language in society*, 35(3), 367–392.
- Stivers, T., & Rossano, F. (2010). Mobilizing response. *Research on Language and Social Interaction*, 43(1), 3–31.
- Stivers, T., Mondada, L. & Steensig, J. (2011). *The morality of knowledge in conversation*. Cambridge University Press.
- Stokoe, E. H. (2000). Constructing topicality in university students' small-group discussion: A conversation analytic approach. *Language and Education*, 14(3), 184–203.
- Strang, K. (2013). Cooperative learning in graduate student projects: Comparing synchronous versus asynchronous collaboration. *Journal of Interactive Learning Research*, 24(4), 447–464.

- Streeck, J. (1995). On Projection. In E. N. Goody (Ed.), *Social intelligence and interaction: Expressions and implications of the social bias in human intelligence* (pp. 87–110). Cambridge University Press.
- Streeck, J. (2009). *Gesturecraft: The manufacture of meaning*. John Benjamins.
- Sun, A., & Chen, X. (2016). Online education and its effective practice: A research review. *Journal of Information Technology Education, 15*, 157–190.
- ten Have, P. (2007). *Doing Conversation Analysis: A Practical Guide*. SAGE Publications.
- Tiittula, L. (1985). Vuoron vaihtuminen keskustelussa. Puheenvuoron alkamista ja päättymistä ilmaiseva verbaalinen ja ei-verbaalinen viestintä ja sen vaikutus vuorojen vaihtumiseen. Helsingin kauppakorkean julkaisuja B-79, Helsinki.
- Torun, E. D. (2013). Synchronous Interaction in Online Learning Environments with Adobe Connect Pro. *Procedia - Social and Behavioral Sciences, 106*, 2492–2499.
- van Berkel, H. J., & Schmidt, H. G. (2000). Motivation to commit oneself as a determinant of achievement in problem-based learning. *Higher Education, 40*, 231–242.
- van Boxtel, C., van der Linden, J., & Kanselaar, G. (2000). Collaborative learning tasks and the elaboration of conceptual knowledge. *Learning and Instruction, 10*, 311–330.
- van Braak, M., Huiskes, M., Schaepkens, S., & Veen, M. (2021). Shall we all unmute? A conversation analysis of participation in online reflection sessions for general practitioners in training. *Languages, 6*(72), 1–18.
- van den Branden, K., Bygate, M. & Norris, J. (Eds). (2009). *Task-based Language Teaching: A Reader*. John Benjamins.
- Vatanen, A. (2020). The interaction order of silent moments in everyday life: Lapses as joint embodied achievements. In A. Dimitrijević & M. B. Buchholz (Eds.), *Silence and*

- Silencing in Psychoanalysis: Cultural, Clinical, and Research Perspectives* (pp. 307–332). Routledge.
- Veen, M., & de la Croix, A. (2017). The swamplands of reflection: using conversation analysis to reveal the architecture of group reflection sessions. *Medical Education*, *51*(3), 324–336.
- Waring, H. Z. (2008). Using explicit positive assessment in the language classroom: IRF, feedback, and learning opportunities. *The Modern Language Journal*, *92*(4), 577-594.
- Warschauer, M., Turbee, L., & Roberts, B. (1996). Computer learning networks and student empowerment. *System*, *24*(1), 1–14.
- Webb, N. M., & Palincsar, A. S. (1996). Group processes in the classroom. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of educational psychology* (pp. 841–873). Simon & Schuster Macmillan.
- Weller, S. (2017). Using internet video calls in qualitative (longitudinal) interviews: Some implications for rapport. *International Journal of Social Research Methodology*, *20*(6), 613–625.
- Wennerstrom, A., & Siegel, A. F. (2003). Keeping the floor in multiparty conversations: Intonation, syntax, and pause. *Discourse Processes*, *36*(2), 77-107.
- Whitehead, K. A. (2011). Some uses of head nods in “third position” in talk-in-interaction. *Gesture*, *11*(2), 103-122.
- Wirkala, C., & Kuhn, D. (2011). Problem-based learning in K–12 education: Is it effective and how does it achieve its effects?. *American Educational Research Journal*, *48*(5), 1157–1186.

- Wong, J. (2000). The token “yeah” in nonnative speaker English conversation. *Research on Language and Social Interaction*, 33(1), 39–67.
- Yamada, M. (2009). The role of social presence in learner-centered communicative language learning using synchronous computer-mediated communication: Experimental study. *Computers & Education*, 52(4), 820–833.
- Yelland, N. (2006). New technologies and young children: Technology in early childhood education. *Teacher Learning Network*, 13(3), 10–13.

## VITA

### Yingliang He

#### Education

- 2023 **Ph.D., Applied Linguistics**, The Pennsylvania State University  
2016 **M.A., Teaching English as a Second Language**, The Pennsylvania State University  
2008 **B.S., Public Administration**, Shanghai University

#### Professional Experience

- 2023 – **Lecturer**, Writing Programs, Humanities Division, University of California, Los Angeles
- 2017-2019 **Research Assistant and Language Specialist**, English for Professional Purposes Intercultural Center (EPPIC), The Pennsylvania State University
- 2017 – 2019 **Research Assistant**, Center for Research on English Language Learning and Teaching (CRELLT), The Pennsylvania State University
- 2015 – 2023 **Instructor**, Department of Applied Linguistics, The Pennsylvania State University
- American Oral English for ITAs II & III
  - English Composition for American Academic Communication II
  - Introduction to Conversation Analysis
  - Language Analysis

#### Publications

- Hall, J. K., He, Y., & Khor, S. Y. (forthcoming, 2022). *The practical nature of l2 teaching*. Routledge.
- Looney, S. D., & He, Y. (2020). Laughter and smiling: sequential resources for managing delayed and disaligning responses. *Classroom Discourse*, 1-25.
- Wang, T., & He, Y. (2021). Teaching domain-based figurative expressions: Designing and implementing CL-informed SCOBAs. *Language and Sociocultural Theory*, 8(1), 120-151.
- Yu, N., Wang, T., & He, Y. (2016). Spatial subsystem of moral metaphors: A cognitive semantic study. *Metaphor and Symbol*, 31(4), 195-211.
- Yu, N., Wang, T., & He, Y. (forthcoming, 2023). Anger metaphors in Chinese. In Z. Kövecses & R. Benczes (Eds.), *Metaphors of ANGER across languages: Universality and variation*. De Gruyter Mouton.