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## Learning About Learning: Classroom Communication and Its Impacts on Students

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LEARNING ABOUT LEARNING: CLASSROOM COMMUNICATION AND ITS  
IMPACTS ON STUDENTS

by

Hope Carroll

A Thesis Submitted in Partial Fulfillment  
of the Requirements for a Degree with Honors  
(Communication)

The Honors College

University of Maine

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## ABSTRACT

Student retention and belonging continue to be a significant challenge in U.S. higher education, exacerbated by the COVID-19 pandemic (Office for Civil Rights, 2021). Particularly, first-year students experience emotional, relational and learning difficulties as they transition to college (Thompson, 2008). In response, scholars propose relationship-rich education as key to student success (Faulkner et al., 2021). Accordingly, this project explored the role of classroom communication in fostering students' learning and sense of belonging through both qualitative interviews with 11 first-year students and a learner's autoethnography. Two research questions were posed: 1) What are first year student perceptions on how communication in the classroom impacts their learning? and 2) What are the impacts of engaging in observations of classroom communication on undergraduate students' relationship to and understanding of learning? With regards to the first question, students named several communication practices as key to their academic success and sense of belonging. These included: connecting with both their peers and instructors, asking questions, and reflecting on their learning and the classroom environment. Addressing the second question, this research supports the value of students conducting classroom observations as a mechanism for becoming stronger advocates for their own learning, growing their metacognitive competencies, and developing an appreciation for the role of diverse relationships and communities in fostering meaningful learning. Results from this project have implications for cultivating relationship-rich educational training for both instructors and students.

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## INTRODUCTION

### *The first year*

The beginning feels impossible

The choices seem daunting

All around me are strangers with masks

I don't know anyone

I don't know myself

I question if I made the right choice

I can't find an interest

Why am I studying this?

Does my teacher even know my name?

How could they?

I don't even know myself

### *The second and third*

I see faces

I see smiles

I'm learning about myself

I'm learning about my community

I want to know more

I look for more



I'm finding my people

I'm finding my place

I'm finding myself

*The final year*

The end has come

Those strangers are now my friends

I've found myself in the work I am doing

I know if I am struggling

I can turn to many

Teachers know me

I know my peers

I feel welcome

I feel comfort

I've found success

I've found myself

This study comes just four years after the hit of the global COVID-19 pandemic and at a time when the world is finally re/adjusting and re/turning to a new normal. But even with the challenges of the pandemic seemingly behind us, undergraduates students are still faced with high levels of stress impacting their educational success (Calderon et al., 2022). Even though student success and wellbeing should be seen as the most important outcome of universities (Hirschy & Wilson, 2002), in reality, they are not

always a top priority (Kerr, 2001). This is often the case when faculty members employed at universities with high research activities are rewarded for their research rather than advancing undergraduate education (Agarwal et al., 2020). Relationships between students and faculty can make or break an undergraduate's educational experience and when those relationships are difficult, students who may already be facing many other stressors find learning even more challenging (Guzzardo et al., 2021). This is especially true for first-year students where the college transition is often very difficult.

First-year students come into a space where they need to build new relationships and the close bonds they had counted on for most of their life are no longer readily available to them. Being away from these long standing relationships can be a hard barrier to overcome as students are adapting to a new environment (Lafreniere & Ledgerwood, 1997). As students transition into their new space and find their place, it is crucial that faculty can recognize and work to help those struggling with the college transition. Faculty are in an important position to encourage students to build relationships by promoting a classroom where students feel comfortable to interact with both the instructor and their peers (Felton & Lambert, 2020). When students connect with an educator that feels like a mentor to them and to whom they can turn to for help, they find greater success in the classroom and in their future (Raposa et al., 2021).

It is important to acknowledge that within the current U.S. higher education system, there are varied possibilities for who educators are. For example, a growing number of Teaching Assistants (TAs) teach first-year/introductory courses (Sundberg et al., 2005). Due to this, TAs play a significant role in the undergraduates educational experience (Sundberg et al., 2005). Given the link between positive instructor communication and

student success (Honeycutt, 2008), it is crucial that TAs are provided with pedagogical training that allows them to understand their impact in the classroom. There is significant research that demonstrates the importance of TA training and how when provided with adequate training, TAs feel more prepared and find greater success in their teaching abilities (Agarwal et al., 2020; Dillard et al., 2023; Shum et al., 2020). Although there is a significant amount of research on instructor communication and effective strategies to teach undergraduates (Fualker et al., 2021; Mazer, 2013; Sidelinger & Booth-Butterfield, 2010), there is little knowledge on instructional communication training for graduate students (Hoffmann-Longtin, 2020). Communication scholars are in a unique position to work towards bridging this gap in knowledge and working to help build training programs that allow for graduate students to implement more equitable practices (Hoffmann-Longtin, 2020). That is why one of the goals of this study is to map the importance of TA training in developing a more inclusive and effective classroom. To date, there is limited research examining the impact that specifically TAs can have on first-year students (Kendall & Schussler, 2013). Relatedly, the current study seeks to understand first-year student perceptions of TAs' communication and how it impacts their learning. The goal of this study is to amplify student voices and give them a space to reflect on a very important transition in their lives and allow them to give their opinions and experiences on their time as a student learning with a TA. This kind of qualitative research is still underrepresented in instructional communication scholarship (Conley & Yun, 2017), and the data will be crucial in demonstrating the knowledge that students have about their own learning and its connection to classroom communication.

This thesis first synthesizes existing literature related to instructional communication, first-year undergraduate experiences, relationship-rich education, and the current extent of GTA training. The second chapter of this study presents the research methodology and explains how both grounded theory and an autoethnography were used to answer the research questions. Grounded theory was used in the process of analyzing the interviews, the results and interpretation of which are the focus of the third chapter. The analysis contains common themes that emerged from the interviews, providing participant quotes, personal descriptions and explanations using existing literature. Succeeding the interview analysis is an autoethnography that seeks to answer the second research question examining how participating in classroom observations can impact a student's understanding of learning. The study ends with a conclusion outlining the findings of the study and limitations of the research.

## LITERATURE REVIEW

Of all undergraduates pursuing a bachelor's degree at 4-year institutions nationwide, 40% do not complete their degree program (McFarland, 2019) and almost a third of first-year students don't return for their second year (Leary et al., 2021). For racially minoritized, low-income and first-generation students this graduation rate is even lower (McFarland, 2019). Although many students look at college for the potential of economic stability and are motivated to achieve this, there are many barriers that get in their way to degree completion (Guzzardo et al., 2021). One factor that higher education institutions often focus on is students' academic preparation (Abele, 2021). However, a study done across all types of institutions with a sample of 22,530 students found that 50% of students who don't finish college are in good academic standing and 35% leave with A and B grades (Bryan et al., 2019). Given this, it is evident that there are many reasons outside of academic preparation and performance that contribute to students not finishing their degrees (Abele, 2021). Some of the factors that have been found to challenge students beyond the classroom include: food scarcity (Bruening et al., 2017), insecure housing (Goldrick-Rab et al., 2017), medical and mental health problems (Goodman, 2017), having to work on top of going to school (Kyte, 2017), disability (Peña et al., 2016), duty to be a caregiver (Wladis, 2018), and trauma (Jolley, 2017).

On top of all of this, the COVID-19 pandemic was another significant contributor to difficult learning experiences and demonstrated just how detrimental it can be for students to miss out on building connections within the classroom. A study of undergraduates at a Canadian university examined students' motivation and engagement and found that when they shifted to remote learning, their achievement and engagement

decreased uniformly (Daniels et al., 2021). Researchers found the biggest decrease in emotional engagement refers to students' attitudes towards the course (Daniels et al., 2021). Another study looking at 167 Economics college students from Madrid found that students who suffered psychological and physical consequences during COVID-19 had difficulty recovering their performance in the classroom (Ferrer et al., 2023).

Furthermore, academic support during the transition to college is critical because first-year students face extreme levels of academic stress (Thompson, 2008). College students frequently report loneliness, homesickness, conflict, and distress in interpersonal relationships, as well as high levels of stress, which interferes with academic performance (Calderon et al., 2022). These increased stressors can leave students vulnerable to mental health problems (Conley et al., 2013). Nowhere is the need for support more evident than in the behaviors of incoming first-year learners during the beginning months of college (Giddan, 1988).

In addition to documenting challenges, scholars have also found that by developing relationships with students, educators can go a long way in supporting learners through the struggles they may be dealing with outside of the classroom (Guzzardo et al., 2021). Guzzardo and colleagues analyzed data from a project that involved surveying and conducting open-ended semi-structured interviews with undergraduates at a public university. The results showed that students appreciated when professors “do more than teach” (Guzzardo et al., 2021, p. 11) when they recognized that students are struggling and were available to help them. On the other hand, relationships with educators that felt difficult for students contributed to struggles in college (Guzzardo et al., 2021).

This chapter outlines the impacts that instructor communication and developing relationships within the classroom have on student success. It examines the factors within and outside of the classroom that contribute to student engagement and interest and how instructors play a big role in this. The chapter ends by exploring the current state of GTA training, the impacts of GTA training, and what more needs to be done in expanding training.

### Instructor Communication and Student Engagement

Instructors can play a big role in making or breaking students' success in the way they present themselves in the classroom and provide support (Faulkner et al., 2021). Negative emotions towards learning play a huge role in students' failure in school (Skinner et al., 2008). Instructors who use positive communication behaviors impact the way a student views the class and contribute to their success (Honeycutt, 2008). When teachers demonstrate passion for their teaching and the subject, this develops stronger motivation and engagement within students to succeed (Levitt et al., 2023). A study done by Taehee Kim and Diane Schallert (2014) surveying 455 undergraduates found that both teacher and peer enthusiasm in the classroom has a positive impact on students' interest in the class subject.

Furthermore, social support predicts how well students adjust during the college transition (Lafreniere & Ledgerwood, 1997). When instructors use immediate and supportive communication behaviors, students perceive them as welcoming and inclusive (Fualker et al., 2021). A study done by Sidelinger and Booth-Butterfield (2010) with 434 undergraduate students looked at how teacher confirmation and classroom connectedness impacted in-and out-of-class involvement. Examples of teacher confirmation behaviors

that they give are: responding to questions, demonstrating interest, and teaching style. Connectedness, on the other hand, is defined as “student-to-student perceptions of a supportive and cooperative communication environment in the classroom” (Dwyer et al., 2004, p. 267). Sidelinger and Booth-Butterfield (2010) found that, no matter the class size, positive perceptions of an instructor, along with positive perceptions of peers as a supportive community promote student involvement. A similar study was done by Mazer (2013), testing four hypotheses that looked at factors of student interest and engagement. The study consisted of 183 undergraduates across all four grades at a large Midwestern university. Students took a survey that measured teacher nonverbal immediacy, teacher clarity, student interest and student engagement. Through this study it was shown that both positive perceptions and the communication behaviors of teachers can play an important role in achieving success in the classroom. Teacher immediacy and clarity can lead students to experience heightened levels of interest and higher levels of engagement (Mazer, 2013).

Immediacy can be defined as “communication behaviors that enhance closeness to and non-verbal interaction with another” (Mehrabian, 1969, p. 202). Teacher immediacy nonverbal cues include eye contact, movement and facial expressions (Andersen, 1979). These behaviors develop a sense of liking and make it easier for students to approach the instructor using nonverbal immediacy (Mehrabian, 1981). Instructors can use these cues to increase student attention and encourage a deeper emotional connection to the class material (Titsworth, 2001). When students feel more emotionally interested in a course subject, it makes it easier for them to encode more of the information with which they are presented in the class (Mazer, 2013).



Approachability of instructors is also important in allowing students to feel comfortable asking questions, which is key to academic success. Understanding the importance of students asking questions, Weijers and colleagues (2024), set up a study that consisted of two experiments. The first experiment had 1011 higher education students who received a prompt nudge, often used as a “poster or sticker that serves as a reminder of the behavior” (Weijers et al., 2024, p.2). The second experiment had 488 higher education students who received goal setting nudges - for example, to ask one question per class. Analysis of these two experiments reinforced the importance of asking questions, finding that students who asked more questions in both experiments achieved higher grade levels (Weijers et al., 2024). After reviewing existing literature on students' questions, Christine Chin and Jonathan Osborne (2008) found that overall, the act of asking a questioning allows learners to engage in critical reasoning through “eliciting explanations, postulating theories, evaluating evidence, justifying reasoning, and clarifying doubts” (p. 2).

#### Student Engagement, Class Size, and Academic Success

Student interest and engagement in the classroom has been shown to lead to improved success in the classroom (Mazer, 2013). Student engagement can be defined as the amount of effort and involvement students put into activities that align with their field of interest (Heaslip et al., 2014). An increase in critical thinking and knowledge retention has been linked to students who report higher levels of engagement in the classroom (Cruce et al., 2006). A study done by George D. Kuh and colleagues (2008) found that students who had higher levels of engagement within their first-year classes are more likely to have continued success throughout the rest of college. This study took data from

universities that administered the National Survey of Student Engagement (NSSE). The study looked at three measurements of engagement on the NSSE: time spent studying, time spent in co-curricular activities, and a global measure of engagement in effective educational practices.

Engagement has also been shown to positively affect motivation and performance for those students who are not academically prepared when they start college (Cruce et al., 2006). However, engagement has been recognized as being lower in large, first-year lecture classes compared to other learning environments (Armbruster et al., 2009). Traditional lectures often contribute to one-way exchanges that consist of passive and superficial learning (Bransford et al., 2000). Larger lectures have been shown to limit student communication (Smith et al., 1996) and discourage student motivation, confidence and excitement (Weimer, 2002). Without motivation, confidence and excitement, students lack the skills necessary to transition from their undergraduate to a professional field (NRC, 2007). The larger the class size, the worse students perform in the class (Gibbs et al., 1996). A study done by Kara and colleagues (2021) evaluated data from a large UK institution over a period of 7 academic years, resulting in a sample of more than 25,000 first-year undergraduate students. Their findings demonstrate that classes with larger enrollment are correlated to lower grades (Kara et al., 2021).

Academic integration can be an important way to improve student retention in these classes (Terenzini et al., 1980). Academic integration can be defined as “strong affiliation with the academic environment both inside and outside of class” (Mangold et al., 2002/2003, p. 97). Such affinity may be easier to foster in smaller classes by promoting interaction and allowing for students to feel seen and receive more support

(Finn et al., 2003), while also positively impacting perceived teacher supportiveness (Wang & Calvano, 2022). Finn and colleagues (2003) reviewed and summarized theory and existing data on class sizes with the goal to answer the question, “Why does it work?” Through their review, they found that students' engagement and sense of belonging are higher in smaller class sizes than in larger ones (Finn et al., 2003).

Engagement and success in class can also come from instructors holding students to a higher standard. In a study done by Rubie-Davies and colleagues (2015), 84 teachers were randomly assigned to an intervention or control group, where the intervention group attended workshops focusing on high expectation teaching and implemented what they learned into the classroom. The study found that when students are held to a higher standard by instructors *and* feel like their instructor believes in them, student success in the class is greater (Rubie-Davies et al., 2015). Being held to a higher standard within classroom settings has also been shown to positively impact students in their future careers (de Boer et al., 2010). Forrest and colleagues (2012) similarly showed this through an autoethnography done by two undergraduates and their instructor accounting their experience of being a part of a classroom that was set up to prioritize discussion rather than the traditional teacher lectures students structure. The instructor set out with a goal to have the material of the class move the students' hearts, as well as their minds. Students in this classroom had the responsibility of leading the class discussion on a certain topic every other week. The undergraduate students described the class structure as “continually challenging our expectations of school” (Forrest et al., 2015, p. 714) and reflected on how traditional classroom setups “may be fostering student disengagement by minimizing the uncertainties inherent in the process of coming to know” (Forrest et

al., 2015, p. 718). The researchers found through this autoethnography the importance of “healthy uncertainty” and how when students are exposed to this, it “breaks through the silencing illusion that ‘everyone else knows and I don’t’” (Forrest et al., 2015, p. 719).

### Relationship-rich Education

The literature on student engagement, success, and instructional communication supports the notion that the classroom should be a place for nurturing relationships. Relationship-rich educational practices, when applied intentionally, can have a meaningful impact on students and learning (Day et al., 2022). Peter Felten and Leo Lambert (2020) coined the phrase “relationship-rich education” based on their research which finds that building relationships leads to transformational learning experiences and increases motivation to learn (Felten & Lambert, 2020). Based on over 400 interviews with students and faculty across 27 American higher education institutions, they outline the need for all types of institutions to place higher prominence on relationships. Student-faculty relationships are successful through reciprocity, mutual respect, clear expectations, personal connection, and shared values (Estepp et al., 2017). One example of this is instructors knowing and using students’ names, which “cultivates a welcoming, inclusive, and equitable classroom environment” (Tanner, 2013, p. 329). Successful student-faculty relationships lead to better learning, achievement, and subjective well-being of the student (Guzzardo et al., 2021). This is also shown in a study done by Raposa and colleagues (2021), where they analyzed the findings from a Gallup-Purdue Index with a sample of 5,684 college graduates. Researchers found that students who have more interaction with faculty members tend to have an easier time being integrated into college social life and do better academically compared to those students who report

less faculty interaction. Additionally, being able to even just name one adult mentor at their university predicted greater student engagement and well-being into their future (Raposa et al., 2021).

Mentors are especially important in the transition period from high school to college as students navigate new independence and adulthood. Mentors are in a position to help first-year students through encouragement and opening doors to academic and career opportunities (Greeson, 2013). Conducting a study that consisted of developing a three-year scholarship program for undergraduates across three, 4-year public universities, Crowe (2021) found that faculty mentorship increases a sense of belonging in students. Students in the scholarship program were required to participate in research with a faculty, take field work and professional development classes, and were supported through peer and faculty mentoring. The results of this study demonstrated that students who were a part of this program compared to those who weren't reported higher perceptions of faculty support as well as a higher satisfaction in their major. But not only are these relationships between faculty and students beneficial for the student they also benefit the instructor. When students are given the opportunity to work as equals with their instructors and feel comfortable providing feedback to them, it allows the instructor to work towards more effective teaching practices (Cook-Sather et al., 2014).

### Student-to-student Relationships

Just as student-faculty connections are important, so are learners' relationships with their peers. Social integration inside and outside the classroom can be crucial for student success. Social integration can be defined as “a strong affiliation with the university’s social milieu: peer group interaction, interaction with faculty, and student

organizations” (Mangold et al., 2002/2003, p. 97). The classroom environment can play an important role in fostering student-to-student connectedness (Sidelinger & Booth-Butterfield, 2010). Strong classroom relationships can work to establish an environment of collaboration where students feel comfortable working in teams and creating emotional bonds (Zhang et al., 2023). Johnson and LaBelle (2016) conducted a study looking at student-to-student confirmation. Confirmation can be defined as a process in which individuals want to interact with each other and their interactions in turn make the individuals feel valued (Sieburg, 1973). To examine student-to-student confirmation, 164 undergraduates were given open-ended questionnaires that allowed participants to describe student confirmation in their own words. Through this study it was shown that student-to-student confirmation was perceived to contribute to “affective learning, perceptions of higher cognitive learning, and motivation to excel in the course” (Johnson & Labelle, 2016, p. 56).

Faculty are in a unique position to help students tap into available resources and build student interaction and, in turn, weave a web of significant relationships (Felton & Lambert, 2020). When instructors create opportunities within the class for students to work in small groups, it creates a feeling of “inclusion, community, and collaboration for students” (Tanner, 2013, p. 328). On the other hand, a lack of on-campus connections for students can greatly impact their motivation (Schwartz, 2018). Felton and Lambert argue that learners need a web of relationships (Felton & Lambert, 2020) that is visible, recognizable, and readily available to them. It includes a vast group of people with different interests and talents that enrich students’ experiences in the diversity of their interests (Humphrey et al., 2023). Student stress in college can partially be attributed to

their separation from a familiar web of relationships that they developed through their childhood (Lafreniere & Ledgerwood, 1997). Without these familiar relationships, students must look to other students for support (Giddan, 1988). Although the importance of informal social relationships has been proven to be crucial in student success, it is often overlooked and focus is put onto formal academic support (Thompson, 2008). In other words, despite its many benefits, relationship-rich education is not prominent in U.S. universities and has not, so far, greatly impacted teaching practices and training (Grunspan et al., 2018).

### Graduate Teaching Assistants and Pedagogical Training

Not only are many graduate students future professors, but even during their advanced degree preparation, they impact undergraduate education directly. Graduate teaching assistants' (GTA) involvement in university classrooms has become so high that in many cases they represent a large portion of the teaching staff in most introductory courses and lab sessions (Sundberg, et al., 2005). This is mainly due to the fact that GTAs are less expensive to hire than full time professors and offer more flexible schedules (Chadha, 2013). GTAs play a crucial role specifically in first-year students' experiences, because they teach such a large majority of undergraduates across the country (Sundberg et al., 2005). In a study focusing on undergraduate chemistry classes, for example, researchers discuss the important part that practical chemistry learning and teaching play in their experience and how GTAs involvement is crucial in supporting the distribution of practical chemistry education (Bretz, 2019).

But despite this increased reliance on GTAs and a recognition of their role, research regarding their impact on teaching and student learning is relatively sparse and

inconclusive (Kendall & Schussler, 2013). Very few GTAs have had prior teaching experience or receive pedagogical training (Schussler et al., 2015). If any training has occurred, it is offered only as an initial introduction (e.g., during busy orientations) with little follow up support (Benedetti et. al., 2023). Providing pedagogical training for GTAs has been difficult mainly due to the fact that they are encouraged to focus the majority of their time on their research and less on teaching (Smith, 2001 as cited in Benedetti et al., 2023). This in turn makes it so most of the GTAs prior knowledge of teaching comes only from what they experienced as a student (Benedetti et al., 2023). In addition to their limited experience and training, TAs face many dialectical tensions within the classroom (Machette, 2021). Further examining these tensions, Machette (2021) interviewed eight GTAs from a university in the United States. Through these interviews GTAs consistently brought up three dialectical tensions they faced in the classroom. These included, “the management of work time and personal time, the desire to be perceived as relatable while also being perceived as a subject expert, as well as the desire for an instructor-led classroom and a student-led classroom” (Machette, 2021, p. 23).

Throughout the last 20 years, the importance of GTA training has become more widely acknowledged. For example, in 1997, 51% of biology departments required any TA training whereas less than 20 years later, 96% of departments required some sort of training (Schussler et al., 2015). However, across many institutions, GTA training standards remain inconsistent (Shum et al., 2021). Even at the University of Maine, there are different approaches to GTA training based on the department (K. Pelletreau, personal communication, November 16, 2023). A study done by Agarwal and colleagues (2020) analyzed literature relating to programs looking to develop STEM graduate



students pedagogical training where they discuss how even though significant research has shown the importance of TA training, there has been little done to “understand the scope of programs available or what practices best serve to prepare STEM graduates for future careers in the academy” (p. 2). They also conclude that it is clear that TAs do not feel adequately equipped to be a part of teaching undergraduate education (Agarwal et al., 2020).

It’s important to also look at student perceptions of TAs to understand their impact on learning, which is what this present study sought out to do. Dillard and colleagues (2023) administered surveys to study student perceptions of TAs across all grade levels. The participants of this study were 2,084 undergraduates enrolled in a lab or discussion section taught by a GTA. The GTAs that were teaching these classes were a part of a pedagogical training course which required the GTAs to obtain feedback from their students halfway through the semester. This feedback was provided through anonymous surveys taken during class time and asking students what the TAs have done to benefit their learning. The researchers distinguished between TA practices that were confidence-, relatedness-, or autonomy-supporting. Majority of answers identified TAs used confidence-supporting strategies with very few naming autonomy-supporting techniques. This finding highlights the need to “support GTAs in developing teaching strategies that promote students' sense of independence and autonomy” (Dillard et al., 2023, p. 43).

Another similar study conducted by Shum and colleagues (2020) sought to convey the importance that training can have on GTAs. Participants were 310 graduate students who participated in a 10-week training course that employed a mix of teacher-

focused techniques and student-focused techniques. As part of the course, participants completed surveys at the beginning and the end of the course. The results of this study found that training can be a crucial factor in allowing GTAs to develop their teaching approaches to be more effective in implementing student-focused teaching (Shum et al., 2020) .

Adding to the complexity of supporting graduate students in becoming effective teachers are cultural considerations. Over the last ten years the United States has seen a significant influx of international students with 40 percent of them enrolled in graduate programs (Adebayo & Allen, 2020). Many universities that enroll international graduate students also employ them as TAs (Gorsuch, 2003). Much of the training for international teaching assistants is focused on working on their English language skills (Gorsuch, 2012). But challenges for international TAs go beyond that and are related to not understanding, being accustomed to, or socialized into the US educational and social system (Williams & Case, 2015). A study done by Meadows and colleagues (2015) put together a training program specifically for international TAs to “promote intercultural teaching competence” (Meadows et al., 2015, p. 36). The study consisted of 204 graduate students who completed questionnaires on their first and last day of the training. The study found that the training program positively impacted TAs to be able to foster undergraduate student engagement in the classroom.

Overall, the existing research on GTA pedagogical training demonstrates how crucial these training programs can be for TAs in providing relationship rich educational strategies into the classroom. Not only will these training programs benefit the TAs in

their academic careers, they will benefit the students in the classrooms when their instructor understands how important a role they play.

### Purpose

This chapter demonstrates the significance that instructor communication and peer relationships in the classroom can have on students and especially first-year learners. That is why for the current study, the focus is solely on the perceptions of first-year students. The chapter conveys the significant literature that already exists on the difficulty of the college transition and how important the support system can be within the classroom and beyond. The chapter also highlights literature on the importance of building relationships in the classroom with instructors and peers alike and ends with a summary of literature on the current state of GTA training since graduate students are a major part of the college teaching labor force. Understanding that students struggle within their transition to college and that GTAs are more and more commonly the instructors in first-year courses, the current study used semi-structured open-ended interviews to fully understand what first-year students perceive as important to their learning as they come into college and in their experiences in the classroom with GTAs. Turning the lens on how students may play a more integral role in shaping their own learning, the study also used an autoethnographic approach to examine the impact that participating in classroom observations can have on undergraduates. The interviews and autoethnography weave together to identify some effects that learning about learning has on undergraduates. There are no existing studies to date that could be found that focus only on first-year learners' perceptions of their GTAs and allow students themselves to reflect on the impact that classroom communication and engaging in classroom

observations has on their learning. To address this gap, the current study set out to explore the following research questions:

1. What are first-year students' perceptions of how communication in the classroom impacts their learning?
  - a. What are the impacts of first year students' communication with GTA instructors?
  - b. What are the impacts of first year students' communication with their peers?
2. What are the impacts of engaging in observations of classroom communication on undergraduate students' relationship to and understanding of learning?

## METHODOLOGY

### Overview of Methodology

In this study, I employ a qualitative approach that explores first-year students' perceptions of communication in the classroom and its impact on sense of belonging and success, addressing a methodological gap in instructional communication research (Conley & Yun, 2017). Instructional communication (IC) refers to “the study of the human communication process across all learning situations independent of subject matter, grade level, or the learning environment” (Myers et al., 2016, p.13). In their systematic review of original IC studies published in the journal *Communication Education* between 2000 and 2016, Conley and Yun (2017) found that over 60% utilized some sort of quantitative methodology and only 14% combined were based on ethnographic, interview, or focus group data. Qualitative inquiry is significant in this study because it honors individuals' stories and makes space for otherwise overlooked voices and experiences (Charmaz, 2009).

For the first part of this study, I interviewed undergraduate students enrolled in courses participating in a Gateways to Success (GTS) project funded by the Alford Foundation. My goal in interviewing students was to listen to them tell their experiences with no judgment so they felt heard and understood that their feedback can make a difference. I analyzed interview data using grounded theory. Grounded theory is a systematic method consisting of several flexible strategies for constructing theory through analyzing qualitative data (Glaser & Strauss, 1967). According to Charmaz and Thornberg (2021), “The defining purpose of this method is to construct a theory that offers an abstract understanding of one or more core concerns in the studied world” (p.

305). Grounded theory is important for this project because it keeps researchers involved with their data and emerging analysis, as well as starts from the inside to understand research participants' meanings and actions (Charmaz, 2017). Grounded theory is based on data, and data allows us to learn from the stories of those left out and permits research participants to break silences (Charmaz & Belgrave, 2019). The grounded theory method helps researchers to move beyond description through constructing new concepts that explicate what is happening (Charmaz & Thornberg, 2021). Grounded theory as a methodology allowed participants in this project to be co-researchers by creating space for them to share their experiences. In constructivist grounded theory, interviewing is seen as emergent interactions through a mutual exploration of the interviewee's experiences and perspectives (Charmaz, 2014). I focused on constructivist grounded theory as it attends to researchers and research participants' language, meanings, and actions (Charmaz, 2017).

The second part of this study is an autoethnography describing my experience as an observer in Spring 2023 and a student over the last three years. The autoethnography serves as a self-reflection on my growth as a researcher, learner, and observer, and what I learned from this experience. Autoethnography is a research and writing method that connects the autobiographical and personal to the cultural, political and social contexts (Ellis & Bochner, 2000). It is a way to analyze and interpret a culture using one's personal story (Snyder, 2015). The use of personal narrative can “produce complex and meaningful phenomena which introduce unique ways of thinking and feeling and help people to make sense of themselves and each other” (Campbell, 2016, p.1). The autoethnography within this study serves to explore the question of the impact that

engaging in classroom observations can have on undergraduates. Through the use of autoethnography I am able to make sense of my place as a learner and analyze my experience within the context of the current educational system.

### Researcher Positionality

As a fourth year student studying Communication with minors in New Media and Marketing, I have had a variety of different experiences within classroom settings and around the UMaine community. I have taken art classes, language classes, coding labs, service learning courses, and a variety of other unique classes which have given me perspective on diverse teaching styles and allowed me to interact with a wide group of individuals. In the Spring of my third year, I worked as a research assistant on the Gateways to Success Project on Relationship-Centered teaching. As a research assistant on this project I observed mainly entry level, core classes taught by TAs to mostly first-year and sophomore students. The observations informed the research team in creating a course for TAs that sought to improve student success and retention through relationship-centered teaching.

Being an observer led me to examine my role as a learner in the classroom, reflect back on my experience with different teaching styles and understand the importance of building relationships within the classroom and beyond. This reflection made me want to further pursue this research focusing on first-year students. I chose to focus my research on first-year students because I thought back to my own experience of transitioning to college and realized how much it could have benefited me to have had stronger relationships with my professors and peers, particularly in classroom settings. My reflection and motivation for this research comes from a position of relative privilege as

an in-state student, fitting in with what would be traditionally considered a “dominant group” (Razzante & Orbe, 2018) within the Predominantly White Institution (PWI) where the research was conducted. Research suggests that challenges of belonging and connection in college are amplified for students identifying with socially-marginalized identities, communities, and experiences (McFarland, 2019).

### Data Collection

#### Site

The University of Maine is a public university with just over 11,000 undergraduates and graduates enrolled. Students come from all 50 states and from 81 countries (University of Maine About UMaine). TAs at the University of Maine span across multiple disciplines and are often the only one teaching many of the introductory classes (University of Maine Graduate School). The following information has been provided by Karen Pelletreau, Director of Faculty Educational Development at UMaine’s Center for Innovation in Teaching and Learning, which describes the current state of TA training at the University of Maine.

Training for TAs is not required at UMaine. Training for both content knowledge and pedagogical techniques falls at department level. But there is often limited pedagogical training because the training that the TAs receive only focuses on the specific course they will be teaching. TAs can also be pulled from other disciplines if there are not enough TAs for that particular discipline. In terms of comparison of STEM vs. non-STEM TA training, CMJ TAs take courses on intersection of pedagogy and content while on the STEM level there is not the same level of agency to teach those concepts (K. Pelletreau, personal communication, November 16, 2023)

To explain the TA training processes at the University of Maine, faculty from each department on the Gateways to Success research team provided personal accounts of what their specific department does to train TAs. Excerpts are quoted below and, with the



respective instructor's permission, the full verbatim accounts are included in Appendix

A.

Molecular and Biomedical Sciences. The graduate teaching assistants in Molecular and Biomedical Sciences have some departmental training they do as a group in regards to safety and overall requirements for the job. For BMB209, we have weekly meetings where we discuss ourselves, our background, and challenges we are facing during the course of the semester. In terms of teaching approaches, we talk about active-learning, relationship-centered teaching, and anti-racist teaching pedagogy. We also discuss course content and strategies that have worked in the past to teach content and manage student conflicts. (J. Newell, personal communication, February 6, 2024).

Biology. The graduate teaching assistants (TAs) in the School of Biology and Ecology do not have departmental training. Our full time teaching team runs all of the training for safety, content, and pedagogy. For BIO 100, we hold weekly meetings where we model the pedagogical approaches that we want the students to experience. Because this is uncompensated service labor for faculty mentors and our training time is limited and constrained by the need to focus on content, relationship-centered preparation has suffered and is done on an ad-hoc basis. Building supportive and diverse relationships in this space is admittedly a challenge. (J. McGuire, personal communication, February 6, 2024).

Communication and Journalism (CMJ). The CMJ Department has a TA Coordinator who designs and facilitates pedagogical training for the 14-16 TAs teaching CMJ courses each semester as instructors of record. We have a Fall orientation, a Fall-semester teaching course, and weekly instructor meetings by course taught. This training focuses on both content and developing classroom communities through instructional communication. The TA coordinator develops curriculum and resource materials for the three courses staffed almost entirely by graduate students (CMJ 102, CMJ 103, and CMJ 106). As their teaching experience grows, most TAs adapt this curriculum and the daily pedagogical approaches to their styles, goals, and philosophies. (L. Herakova, personal communication, February 6, 2024).

### Process

The study received approval by the UMaine Ethics Board (IRB) on August 2, 2023 (Appendix B). Participants were recruited through announcements posted by Teaching Assistants on the learning management platform the courses utilized (BrightSpace). Participation was incentivized with extra credit and a \$20 Amazon gift

card. Interviews took place from October 2023 to November 2023. Interviews were conducted over Zoom and were audio recorded. Participants were asked to create a pseudonym and use that name on Zoom. There was one interview conducted with each student, which was a loosely structured open-ended conversation following a predetermined set of interview questions (Appendix C). Participants were asked questions about their experience overall as UMaine students and specifically their experience in the class taught by the TA. Interviews lasted around 20-30 minutes. After each interview, I took 10 minutes to write a short reflection about my initial thoughts.

### Participants

For this research project, 12 different interviews were conducted over a month-long period. Participants demographic data cannot be reported. Self-identifications, such as gender, race, age, nationality, in-state/out-of-state, were not asked of participants, and the researcher feels it is unethical to make assumptions based on appearances.

Participants were all first-year students enrolled in BIO 100: Basic Biology, BMB 209: Fundamentals of Chemistry Lab or CMJ 103: Public Speaking. Both BIO 100 and BMB 209 were, at the time, defined as a Gateways to Success course. These courses are large enrollment courses in which more than 3% of the enrolled first and second year students receive a D, F, W or L within the last three years (University of Maine System Transforms). CMJ 103 was chosen as part of the research because it is a comparable large enrollment non-STEM entry-level course taught by TAs and it is important in comparing it to the STEM classes. CMJ 103 enrolls around 450 students each semester, split among 20 or so sections, capped at 24 students each. Participants in the interviews had varying

majors, especially those enrolled in the CMJ 103 class. Mainly nursing students were interviewed from the BIO and BMB classes.

### Data Analysis

Following grounded theory as a methodology (Glaser & Strauss, 1967), analysis began by becoming familiar with the data. I first re-listened to all interviews, reviewing and editing the transcripts created by Zoom. After editing was completed, I went through each interview transcript and coded every line of each transcript. Examples of codes included, “classmates working together” or “encouragement from TA.” I then went through these codes and put them into a code book (Appendix D). If there was a repeated code I would only put it in the code book once. In order to develop the code book I went through each transcript one by one and copied and pasted the code from the transcript into the code book. As I worked my way through the code book I constantly had my research questions at the top of the page to guide me.

For each individual code I added a description of the code, a representative example and a preliminary category within which the code may fit. Descriptions gave context to the code. Representative examples were copied and pasted from the transcript to include the participants exact wording. Categories were helpful in suggesting how codes may cluster together and identify emergent themes. Examples of categories included “TA communication” or “classroom strategies.” During the process of coding I started to develop emergent themes and examine how different codes could fit into these themes. After the coding process I wrote an analytic memo reflecting on the process and my reactions to and ideas about the data. The analytic memo helped to examine important themes that were coming forward, themes and responses that I needed to understand

better, a preliminary answer to my research question as well as emotions and memories that came up during the coding process. Emergent themes that I found during this process were “smaller class settings,” “hands on work,” and “peer interactions” all contributing to a better learning environment for students.

### Autoethnographic Process

I explored the second research question through an autoethnographic approach. Before sitting down to write my autoethnography I had done a lot of previous reflection, especially during my time as an observer. A lot of my reflection came in the form of conversations with my research partner after we completed our observations and talking about specific personal memories that the classes we had observed brought up. I also did a lot of my own reflection during that semester and thought back to my most memorable (good and bad) moments as a student. For writing the autoethnography I began to write down those moments and expand upon why they were important to me and what epiphanies they were bringing up for me. Something that I had not really reflected on that much before but what I brought up a lot in my autoethnography was my experience with COVID and online classes my freshman year and how that really affected me. This then led me to examine not only how I have grown since that time but also how the community around me has grown.

The process of writing the autoethnography included going back and looking over past self reflection writing that occurred during my time as an observer. This helped me to orient myself on what I was thinking at the time as well as brought up a lot of important memories from that experience. As I was writing the autoethnography, I would remember certain research articles I had read during the research design phase. I would

go back and find these articles and then intertwine them with my own experiences to help place my own critical moments in a larger social context. As I continued to draft my autoethnography, certain experiences reminded me of others, so I found that the writing flew together easily. A lot of the positive experiences that I had in classes later in my time as a college student would remind me of certain negative experiences as a freshman which led me to reflect a lot on my growth and what contributed to this growth.

Combining the autoethnographic approach with the ethnographic interviewing allowed me to listen to my own voices as well as my peers' voices in conversation. Being able to put these together was crucial in understanding how students' voices can shape their own learning. This research is important within instructional communication because it addresses the need for more qualitative studies within the field (Conley & Yun, 2017). The use of these qualitative methods within this study lead me to gain a better understanding of myself and my participants as learners by providing spaces for reflection on not only academic but personal experiences.

## INTERVIEW ANALYSIS

In this chapter I provide an analysis of the 12 interviews that I conducted with first-years students in classes taught by TAs. The findings in this chapter speak to the first research question about first-year student perceptions of how communication in the classroom impacts their learning, particularly attending to interactions with both TAs and peers. The main themes that emerged - and are discussed in more detail below - included: classroom communication as learning, class size as a communication context impacting learning, and instructional communication strategies that made a positive impact on learning. Within these main themes, sub themes emerged that demonstrated participants' understanding of their own learning. The questions that were asked of participants (Appendix C) aimed to retrieve neutral responses but interviewees tended to share more about what worked for them rather than what wasn't working for them. Participants acknowledged the TA's approachability and opportunities to ask the TA questions as being beneficial to their learning. Additionally, interviewees commented on the relatability of the TAs as distinct from their experiences with other instructors, which was brought up as both a positive and negative factor relating to learning.

Participants also brought up how the smaller class sizes were helpful to them. Questions about class size were not part of the interview script, but when asked about their experience in the classroom, participants often discussed the benefits they had felt in smaller classes. They ruminated on how these class settings reminded them of high school, which demonstrated students' tendency to compare their most recent learning experience to their current one and recognize what works for them as learners. This finding supports that TA training should include familiarizing graduate students with the

current k-12 system and supporting the development of strategies through which TAs inquire from students about what their learning experiences so far have been like

Lastly, participants discussed strategies that TAs implemented into their classes that worked for them as learners. They brought up reflection exercises, sharing and reporting out their learning to their peers, and working with fellow learners in small groups as beneficial to them and their success. Even when some participants felt that engaging in peer interaction was distracting to them, these recognitions demonstrate a level of metacognition. Although metacognition among first-years students was not an initial focus of the study, it emerged as important in the interviews and will be discussed in more details further below.

#### Classroom Communication and/as Learning

Across the interviews conducted, participants portrayed an understanding of communication as closely related to their learning. There were many different examples brought up in relation to peer and TA communication and participants directly or indirectly related these instances to their learning. Specifically, the following sub-themes emerged: 1) valuing asking questions and TA support in answering those; 2) dialectical or contradictory experiences of TA relatability and authority; 3) peer communication's impacts on classroom learning.

A common positive experience that was highlighted as contributing to learning was *being able to easily approach the TA with questions*. One participant cited that they appreciate the patience of the TA when they ask them questions and said the following:

Just last class we were really confused with our lab, and we probably asked, I swear, like 5 questions, and every single time he'd come over as soon as he could be okay like, and walk us through it just because we are super confused... he was

very like always approached us with a smile always was like, okay, let's like, let's work this out.

It's important for students to not feel like they are a burden when asking the instructor questions. This quote demonstrates how because the TA was perceived as approachable, the participant felt like they can ask them anything and they understand that this is helpful to their learning. As first-years come into a new environment it's crucial that their classes feel like safe spaces and instructors can play a big role in creating those spaces. Instructors' approachability has been linked to increasing student attention and encouraging a deeper emotional connection to the class material (Titsworth, 2001). Verbal and nonverbal behaviors of interest and engagement, such as smiling, can be defined as teacher immediacy: "communication behaviors that enhance closeness to and non-verbal interaction with another" (Mehrabian, 1969, p. 202).

Students felt like it was easier for them to ask questions to the instructor because the classes being taught by TAs were in smaller class settings, which is discussed in more detail further below. Participants noted that in smaller classes they felt more comfortable raising their hands in front of the class or going up to the TA to ask them questions. One participant described how this was important to them saying:

I think that if I was in a place where I was super scared to ask questions and worried to feel like dumb, or anything like that. Then I wouldn't be able to have such an achievement in the class, because for me especially, I will always like to ask for help.

The participant shows a clear understanding of what being able to ask for help means to them and their success in the class. They describe their lab as somewhere that they feel comfortable in asking whatever questions they need help on and how this is beneficial for



them in their learning. This is important because being able to ask questions in a classroom benefits both the student and the instructor in accomplishing educational goals (Weijers et al., 2024). The act of asking a question allows learners to engage in critical reasoning through “eliciting explanations, postulating theories, evaluating evidence, justifying reasoning, and clarifying doubts” (Chin & Osborne, 2008, p. 2).

Interviewees also mentioned that they feel TAs are more approachable because they aren't a “real professor” and are closer in age to them. Although this may seem like a good thing for many US students, international TAs may feel differently (Williams & Case, 2015). It is important to consider the cultural differences of US and international TAs and learners. Within the current study, participants responded variably to the TAs relatability to them. One interviewee said that, “you don't have to call her doctor or anything, because she's still a student, kinda just like you are. So that's what makes it so easy to go up and ask some questions.” This quote demonstrates the importance of TAs as part of an undergraduate's education experience, consistent with prior research (Bretz, 2019; Sundberg et al., 2005). Coming to college can be difficult for many and being able to connect with instructors that feel more similar to the student can be extremely helpful in making them feel comfortable and achieve success in the classroom.

But on the other hand, some participants felt that the relatability of TAs diminished their authority and made them question the TAs motivation to be teaching them. One student said:

Even though she's relatable, she sometimes takes that to a different degree, or like the first, I think, like one of the first days she was like, “Oh, I'm just doing this so that I can go to the next step of my life,” which I don't think that was super good but like I remembered it, and I told my mom, and I was like, yeah, like, I don't know how I'm gonna do well in this class if she doesn't even want to teach it.

Undergraduate students here are naming an interesting tension between the TAs' relatability and authority, which echoes findings of Machette's (2021) research with TAs. Some students view TAs' relatability as beneficial to their learning because it's easier to approach them with questions compared to a "real" professor. However, for some students feeling that the TA is so similar to them puts into question the authority of the TA and students worry that it may be negatively impacting their success in the classroom. A study done by Muzaka (2009) surveyed both undergraduates and GTAs with open-ended questions about the positive and negative aspects of GTA-run courses. Survey results showed that GTAs felt like they lacked authority within their classroom and a similar note was echoed from the student perspective (Muzaka, 2009). The study also discussed the difficulty GTAs have deciding whether to be more informal as to engage the class or strict to try and convey authority (Muzaka, 2009).

This questioning of authority is brought up again by another participant who says, "she doesn't seem like a teacher, because she doesn't really teach, she just kind of relays the information and then, like, let's you do your own thing." Here the participant is critiquing the transmission model of communication that is occurring in the classroom between the student and instructor and views it as ineffective to their learning (Bransford et al., 2000). The participant clearly appreciates that learning is more than just relaying information and that they need something more, as also evidenced in the literature on relationship-rich education. Developing meaningful relationships within the classroom between faculty and students leads to better learning, achievement, and subjective well-being of the student (Guzzardo et al., 2021). These relationships are successful through reciprocity, mutual respect, clear expectations, personal connection, and shared values

(Estepp et al., 2017). Students appreciate instructors who show their passion for the subject and for teaching - they want to feel like what they are studying matters and instructor communication helps establish that. When teachers and/or peers demonstrate passion and enthusiasm for learning and the subject, this develops stronger motivation and engagement within students to succeed (Kim & Schallert, 2014; Levitt et al., 2023).

Additionally to TA interactions, student to student interactions were commonly brought up in relation to how these exchanges affect participants' learning. One participant said about their experience working with others, “we work together on most of the assignments that we have in class which I really like, because I like working with others. I feel like it's more beneficial for me when I'm learning the material.” The participant has a clear understanding of how important working with their classmates is to their learning. Awareness and control of thinking for learning can be defined as metacognition (Cross & Paris, 1988). Students that exhibit metacognition in relation to their learning can better identify concepts they do not understand and recognize what can help them in learning these concepts (Wang et al., 1990). Working together in small groups can be a beneficial way for students to build metacognition within one another and develop better learning outcomes in the classroom (Stanton, 2021). When instructors encourage and allow for metacognition within the classroom, it enables students to build confidence in themselves by becoming more effective learners (Stanton, 2021).

On the other hand, some participants said that they feel like talking with others during class would distract them from getting the tasks done successfully, “sometimes I really like to talk to other people, but I feel like lab might not be the like place for it because of like, you know, I feel like that'd be more opportunity for, like mistakes and

people not being like aware or like tentative.” Lab for this participant feels like a space where they need to focus, and talking with peers would take away from that concentration.

An interesting difference occurs between these two presented quotes, one participant sees peer interaction as helpful in problem solving while the other sees it as a distraction from getting things done. In both cases however, students are displaying that they have a clear understanding of what works best for them in terms of their learning environment. Again, this demonstrates metacognition, which is important in students academic success because it allows students to better evaluate what works for them in the classroom and implement these strategies for themselves. Metacognition empowers students to become more “expert-like” in their own learning and in the process become more efficient and effective (Stanton, 2021, p. 1).

#### Communication Context: Class Size

Across all interviews, lab settings and public speaking classes alike, smaller class size was assessed as positive in relation to participants' learning and transition to college. To interviewees, the smaller class size made it easier to 1) ask questions, 2) feel a sense of familiarity during the transition to college (through comparisons to high school), and 3) get to know their peers and develop relationships.

Participants described how small class sizes give them more confidence in themselves and trust in their fellow learners. One participant said, “I feel like I could literally raise my hand in front of everybody, and I'm not scared to do that, whereas in the lecture I'm like, oh, like I might as well just ask my friend instead.” The participant describes here that because of the small class environment they feel more empowered to

ask questions to the instructor in front of the whole class. This is important because normally when there is one student that is confused there is a good chance others are as well. Having students ask these questions in front of everyone not only benefits them, but benefits others in the class as well (Nadile et al., 2021).

Over and over again participants said that compared to a lecture setting, the smaller TA-taught classes and labs made students feel more comfortable asking questions and participating in general. One participant describes this comparison as:

In the big lecture halls, I don't ask questions at all, because it's terrifying. But with that kind of feel [of the smaller class], I'm able to ask questions, and I don't like get all anxious or anything like that, like I feel like it's just a better environment to be confused in because it's easy to work through, like in the lecture hall if I'm confused and I kind of just shut down because I'm like, no one's gonna be able to help me.

The way this participant describes the difference they feel in lecture versus lab is really important in considering the link between class size and learning. The participant says that their lab compared to their lecture is “a better environment to be confused in” this acknowledges that the participant understands what is important for them in their learning environment and that when there is a smaller instructor to student ratio, it is beneficial to their success. This participant’s understanding indicates a growth mindset where making mistakes is seen as a necessary part of learning. Importantly, “A growth mindset is more likely to exist when a person has experienced success beforehand. Success leads to a growth mindset and a growth mindset leads to success” (Nottingham & Larsson, 2018, p. 41). For the interview participant quoted above, small classroom settings are conducive to growth mindset, which then can be related to success. For example, a study done by Kara and colleagues (2021) with more than 25,000 first-year undergraduate students in the UK found that larger class sizes are correlated to lower grades (Kara et al., 2021). This could

in part be due to the fact that small classes promote interaction and allow for students to feel seen and receive more support (Finn et al. 2003), while also positively perceiving teacher supportiveness (Wang & Calvano, 2022).

Another important aspect of class size was the comparison that many students made to the class size of their labs and public speaking classes being more similar to high school. Considering that nationwide almost a third of first-year students don't return for their second year (Leary et al., 2021), this comparison is important because it suggests it's crucial that students find comfort and familiarity in their transition to college. One participant said, "It's sort of more similar to a high school class, just because of the size, and like having the instructor be more available to answer questions right when you need them." The participant here acknowledges the connection that small class sizes have with more interaction with the instructor. They recognize this similarity to the most recent educational experience they had before coming to college and compare it to what they are experiencing now.

Another student similarly speaks to parallels with high school by saying, "He [the TA] knows my name which just makes it feel more homey, cause, like I've been missing a lot of the high school feel where all my teachers knew me, and like I knew everyone in the class." This is an important recognition that this participant makes in acknowledging the significance of the TA knowing their name and how that contributes to a positive learning environment (Tanner, 2013). Moving from small class sizes to large class sizes can cause significant negative impacts on students' improvement (Blatchford & Russell, 2020) which would further explain why students felt more comfortable in the class environments that reminded them of high school.

On the other hand, some participants discussed how different their classes felt to high school. One student said, referring to their lab, “It's definitely not as it would be, say in high school, where I've known all these people for like many, many years, but it's definitely not bad.” This participant acknowledges the difficulty of the college transition and understands the importance of knowing and building relationships with people within their class. Through the use of a diary-interview method and analysis using grounded theory, Blaire Thompson (2008) found that student academic support during the transition to college is essential because first-year students face high levels of academic stress. Additionally, a study done by Sidelinger and Booth-Butterfield (2010) surveyed 434 undergraduate students across all grade levels. Students were asked to think about the class they had taken prior to the one they were currently in and answer questions relating to teacher confirmation, classroom connectedness and involvement in and outside of class. The results showed that the classroom environment can play an important role in fostering student-to-student connectedness and make it easier for students in their transition to college (Sidelinger & Booth-Butterfield, 2010).

Smaller class sizes allow students to connect more with their peers and develop relationships within the classroom setting. These connections are important for students because it not only helps them learn from each other but provides them with a beneficial social outlet that is especially important for freshmen as they come into a new environment. One participant said about their transition into college,

“It's been a really big change, cause I'm not from Maine, so that definitely kinda has impacted things. And I feel like when I came here, a lot of people already

kind of knew each other. So it's kinda like, Oh, let me try and find a group. But everybody already has a group.”

The participant here described the difficulty of coming into college and not knowing anyone, but they went on to say that after a couple of months, it had gotten easier to meet new people, crediting their lab as a contributor to that. They described the lab as being “a lot of hands on, like you kind of need to know the people who you're around, and you definitely need to trust them. Because if you mess up one step and you have to start all over. So it definitely builds more sense of belonging with your groups.”

This is important because it conveys how through the hands-on work that students are assigned to do in the lab, relationships among classmates are cultivated that allow them to work successfully. The participant acknowledged how through the small classroom environment, it was easier to meet new people and develop a sense of belonging that they were lacking when they first came to college. Participants demonstrate a strong awareness of their web of relationships (Felton & Lambert, 2020) within the classroom environment. This awareness allows for students to interact with a diverse group of people that they may not normally interact with outside of class. When students have strong connections with the people around them in college, it can help them to achieve higher motivation (Schwartz, 2018).

These findings on the importance of relationships are consistent with existing research. Classroom relationships are built around encouragement and cooperation and play a significant role in feeling connected. Strong classroom relationships can work to establish an environment of collaboration where students feel comfortable working in



teams and creating emotional bonds (Zhang et al., 2023). Johnson and LaBelle (2016) conducted a study looking at student-to-student confirmation. Confirmation can be defined as a process in which individuals want to interact with each other and their interactions in turn make the individuals feel valued (Sieburg, 1973). To examine student-to-student confirmation, 164 undergraduates were given open-ended questionnaires that allowed participants to describe student confirmation in their own words. Through this study it was shown that student-to-student confirmation was perceived to contribute to “affective learning, perceptions of higher cognitive learning, and motivation to excel in the course” (Johnson & Labelle, 2016, p. 56).

Overall, participants conveyed their understanding of the impact that being in a small class has on them. They acknowledge how through these smaller settings it allows them to connect on a deeper level with their classmates and their instructor, which they recognized as having a positive impact on them as a learner. Thus demonstrating how a smaller class size seems to be supportive of learning through the possibility of relationship-building and fostering a growth mindset.

#### Communicating Success: Instructional Strategies with Positive Impacts on Learning

Across the interviews, participants discussed strategies that the TAs used in the classroom that contributed to their success as a learner. Participants mentioned many different specific examples of what they do in class that helps them learn the material better, including reflection exercises, reporting and sharing learning with classmates, and working in small groups. Thus, it was evident that the strategies interviewees saw as helpful to their learning crossed various communication contexts, such as intrapersonal (reflection), interpersonal and small group, and public speaking. Taken together, this

suggests that, across disciplines, learners recognize the scholastic and relational *value in engaging in a variety of communication activities* in the classroom, regardless of the particular subject matter.

One strategy participants named as helpful was being able to reflect on what they have learned over a certain period of time. One student said their instructor called this a “lighting write,” which was described as,

“writing down every single thing that you're learning within that, like the last week that you've had. So it gets to have, like all the information that you learned just like jotted out and that like creates a space for you to just kind of see what you know and see what you don't know.”

The student added that what they appreciated about this experience was being able to talk and compare with their classmates what they have each learned over the last week, “Oh, what did you learn? And then I get to be like, Oh, wait! I didn't know that, so I'll go back and look at the notes or do something like that, or look at the reading.” The student understands the importance of this classroom activity as essential to their learning in being able to reflect on, compare with their classmates, and revisit key learning. Engaging in reflection activities can improve academic performance (Alt & Riachel, 2020). Reflection builds students' metacognition by allowing “students to be aware of their tasks and have knowledge of themselves as learners” (Alt & Raichel, 2020, p. 147). A study done by Bye, Smith, and Rallis (2009) had students share their reflection essays with their peers through discussion forums and interact with them. Through this exercise it was found that students who engaged with their peers through reflective practices

achieved more success in learning course objectives compared to the students who handed in paper copies without any reflection (Bye et al., 2009).

Another classroom strategy that was brought up was report outs to the class. One participant described it as,

“Once every couple of weeks we'll do a report on a specific thing that we did within those couple of weeks. I think it holds you to a higher standard when you're talking in front of people. And so I actually have to like, make sure everything was correct, and, like all my resources, were right and everything like that. I think it's a good thing to set up like students to do that. So then they like to have valuable information instead of something that they're just trying to get done for the class.”

This participant acknowledged the reports as something that pushed them and their fellow classmates to a higher standard. They saw report outs as a valuable tool to their learning because students are encouraged to seek out information on their own and present it in front of their peers. This finding is echoed in a study done by Rubie-Davies and colleagues (2015), which took 84 teachers and randomly assigned them to an intervention or control group where the intervention group attended workshops focusing on high expectation teaching and implemented what they learned into the classroom. The study found that student success in the classroom is greater when they are held to a higher standard by instructors and feel like their instructor believes in them (Rubie-Davies et al., 2015). Being held to a higher standard within classroom settings has also been shown to positively impact students in their future careers (de Boer et al., 2010).

Another memorable classroom strategy that was brought up across interviews was small group discussions. Participants mentioned how it was easier to share their thoughts and opinions working in smaller groups, and it was valuable to hear people with differing opinions than their own. One participant described their experience as,

“I’ve worked with people in that class that I feel like I definitely wouldn’t agree with on things, and probably wouldn’t, you know, like choose to be friends with but like I feel like we work together fine and like I felt like they were very like respectful in a classroom setting, and you know, I feel like everyone’s very willing to like, at least in like a smaller group setting. Everyone’s very willing to like, like to share and interact with each other.”

This quote demonstrates the importance of the classroom being a place to interact with people who may otherwise not be in the particular student’s circles on a regular basis.

These kinds of relationships are important in engaging with diverse perspectives and gaining a better understanding of the school community you are a part of. The participant views the smaller group setting as a space where students feel more comfortable sharing with each other and that everyone is respectful of each other’s opinions which is important in developing a safe and comforting classroom setting. Research from a meta analysis looking at different small group methods and how they impact undergraduate students in STEM classes found that implementing small group work into the classroom has a positive impact on student achievement. Additionally, this research found that small group activities proved to be more effective for first-year students (Kalaian et al., 2018).

Participants demonstrated a strong understanding of the impact that communication activities within the classroom has on not only their learning but the environment of the classroom. Strategies such as reflection, report outs and small group activities were all brought up as activities within the class that held students to a higher academic standard as well as made them feel more comfortable communicating with their peers and instructor.

#### Chapter Conclusion: Communication Really IS Key

As discussed in this chapter, interviewees demonstrated their ability to understand how communication practices within the classroom impact their learning. It is notable

that interview questions asked participants about their “experiences” in the classroom. With the exception of one question, none directly mentioned the word “communication.” Yet, from the very beginning of reflecting on their classroom “experiences,” participants organically connected communication to learning. This speaks to the importance of instructional communication and learners’ deep understanding of its value. Importantly, instructional communication emerged as key to fostering and honoring learners’ metacognition, which can further support their success (Nottingham & Larsson, 2018). Experiences that were discussed as meaningful in the interviews included: appreciation of the approachability of the TA and being able to easily ask them questions, tension related to TAs balancing relatability and authority, small class sizes improving the connectivity of the classroom and reminding them of high school. TA communication strategies were also brought up as students commented on how being given the opportunity to reflect, to share their learning with their classmates, and to work in small groups contributed to greater success for some, while others noted peer interaction as distracting from learning. It is important to note here that even though demographics were not brought up in interviews, it is clear that the participants in this study do not represent all students’ feelings on certain instructional strategies. Strategies that participants mentioned that work well for them may not work for everyone. Although ethnicity was not shared, all participants attend a predominantly white institution where diversity is limited. It’s important to acknowledge the difficulty that ethnic minority students face in education (Glock et al., 2019) and that viewpoints from minority groups are missing in this study. However, reflections from participants in this study are still important in how they conveyed an awareness of their own learning and conveyed levels of metacognition. The

emergence of metacognition relating to students' perceptions of classroom communication was not an explicit focus of the initial research design. Yet, metacognition was a connective thread among the interviews, demonstrating how the communication practices of inquiry (asking questions) and reflection within the classroom can stimulate metacognition.

### Instructional Communication

Findings from this study support well-documented research on the importance of teachers communicating with immediacy, passion, and clarity (Mazer, 2013). Such approaches help foster relationships, which is important because when students develop strong relationships with instructors as well as with their peers, it leads to an increased motivation to learn as well as higher educational achievement (Felten & Lambert, 2020). It also allows for students to feel like they have a place to turn to when they are struggling and create a safer learning environment (Guzzardo et al., 2021).

Additionally, results from this project contribute to our understanding of the links between instructional communication, metacognition, and learners' perceptions of success. Outcomes from the interviews are crucial in furthering the development of instructional communication strategies. Participants' responses convey the importance of thinking out loud about learning. This can be an important step forward in rethinking curriculum to include opportunities for students to reflect on their learning and grow their metacognitive abilities. Participants demonstrated that knowing what works for them in the classroom gives them more self-efficacy as a learner (Cera et al., 2013). Incorporating strategies into the classroom that give students these possibilities to think critically and reflectively about past and current experiences in the classroom and beyond will grow

their confidence and contribute to their achievements as learners. Participants in this study spanned multiple academic fields which demonstrates the importance of providing these reflective opportunities to all students, no matter the discipline. Allowing for opportunities within the classroom to think about things other than course content -- for example, discussing which activities work for students and which ones don't -- will create a classroom environment of success. Furthermore, the current study suggests reflection should be facilitated through various communication approaches, such as silent introspection, peer sharing, and class reports. These strategies will be especially important for first-years as they are just starting their college education and can begin to develop and take ownership in their learning as they are given opportunities to reflect and share what works for them.

### TA Training

In order to successfully incorporate instructional communication strategies that support student success and relationship-building, TAs must be given expansive opportunities for pedagogical training that highlights the importance of students thinking about their learning. It's also crucial that within these trainings, international TA training is included that considers both cultural differences and opportunities to weave their own cultural values into teaching. These training sessions for all TAs can lead to a more inclusive learning environment that empowers students and instructors alike. Overall, the study points to specific topics that would be important to include and understand further in TA training. In order to help TAs navigate their role as an instructor in the classroom, training for TAs should address the reliability-authority dialectic tension and cultural expectations of the student-instructor relationship within class contexts and relationship-

rich education. Trainings should also provide TAs with the necessary skills in being able to create multiple and diverse opportunities for question asking and navigating the tension between metacognitive and socialization benefits of small group work, on one hand, and the task-distraction on the other. As well as strategies for developing relationships within the classroom that work towards creating an environment where students feel comfortable interacting with both their instructor and peers. Strategies could include emphasizing the importance of instructors calling their students by name (Tanner, 2013) and encouraging students to share their learning with their peers (Bye et al., 2009). Training must draw attention to TAs unique position to build a sense of belonging in their classroom by tapping into their experience as both learners and instructors and connecting with their students in a way that full-time faculty might not be able to.

Incorporating these topics into future training will go a long way in growing TA awareness of their role and how they can contribute to an effective learning environment for all students.



## A TAPESTRY IN THE MAKING: A LEARNER'S AUTOETHNOGRAPHY

Throughout this chapter I reflect on and analyze my experiences of being an undergraduate student at the University of Maine. This autoethnography explores a learner's process of coming to notice the impact of instructional communication on learning and engagement. Specifically, I address the following research question: What are the impacts of engaging in observations of classroom communication on undergraduate students' relationship to and understanding of learning? In responding to this question, my own personal stories of memorable moments (in italics) as a learner are interwoven with literature that helps me make sense of my experiences within the framework of instructional communication. At the end of each section, there is a letter written to myself in the past that works to show my growth as a learner and how what I have learned about communication within the classroom has changed the way I think about my education development. As discussed in the methods section, I drafted this autoethnography after completing classroom observations as a research assistant on a Gateways to Success project at the University of Maine. Having gained a new perspective, I revisited my college learning experiences and considered them in a different light.

### Threads: My Learning Experience in Review

Throughout my experience as a student I have always been more successful in classes where I feel comfortable to ask for help. Whether turning to peers around me or the teacher, seeking support is how I've experienced becoming part of a teaching/learning community (hooks, 1994) that has sustained me and my success.

*It's the spring semester of my junior year. I am taking a Service Marketing class toward my minor. I'm in the class talking with my group about what we have to get done for the rest of our final project which deals with developing a new service for the market. I feel overwhelmed looking at all of the steps we haven't done yet and I don't feel like my group is on the same page, which is frustrating me and making it harder to get work done. The course's Maine Learning Assistant (MLA) comes over to our group and asks how we are doing. I tell her that I am struggling to come up with a pricing strategy for our service. She provides our group with resources on how to develop a correct pricing strategy and gives us a workable checklist to get this milestone done on time. She helps. I feel less anxious about the upcoming deadlines and I feel more motivated to work on the project. For the rest of the semester, I ask for help a lot in this class. Today, I feel like because of the help that was offered and my willingness to ask questions, I developed a good relationship with the MLA which contributed to my success in the class.*

Peter Felten and Leo Lambert (2020) conducted research to demonstrate just how important relationships within the classroom are. They found that building relationships leads to transformational learning experiences and increases motivation to learn (Felten & Lambert, 2020). Based on over 400 interviews with students and faculty across 27 American higher education institutions, they outline the need for all types of institutions to place higher prominence on relationships.

Reflecting back on my positive and negative experiences throughout my college education and research on instructional communication, I was able to understand why my first year of college was so difficult for me. Having started college during the COVID-19 pandemic, all my classes were online and there was never any opportunity to connect

with the instructor or my classmates. I didn't feel like I was interested in any of the topics I was learning and because of this I struggled academically. This was not an uncommon experience. A study of undergraduates at a Canadian university examined their motivation and engagement and found that when they shifted to remote learning, their achievement and engagement decreased uniformly (Daniels et al., 2021). Researchers found the biggest decrease in emotional engagement referred to students' attitudes towards the course (Daniels et al., 2021). This means that online learning during COVID-19 made it more difficult than ever for students to find interest in what they were learning and because of this, their success in their classes was not up to the standard they were used to. Seeing their grades dropping was an added stress to all the horrible things that were already going on in the world.

For me, the academic struggle was more difficult because I was in a brand new place, away from my family and there were limited chances to interact and meet new people. After reading articles relating to barriers to student success, I came to better understand how crucial academic support is for students in the college transition process because of the high level of stress that they feel (Thompson, 2008). This was really important for me to understand while reflecting back on my freshman year. Before being a part of the Gateways to Success team, I looked back on my first year of college with self consciousness because I didn't "succeed" as well academically as I had done in high school.

*It's the end of my first semester freshman year and I open my computer to look at my final grades. I'm at home because due to the COVID pandemic, winter "break" was from Thanksgiving until the end of January. I completed my first ever college finals*

*online, at home. All semester I had struggled with my classes and, now, as I am about to look at my grades, I already know I've done poorly. I had to take my two science credits this semester, which ended up being food and nutrition, and astronomy. For the required astronomy lab credit, I looked at stars on my computer. The whole semester I have been feeling like I'm learning nothing and was embarrassed by my exam grades. So, sitting here, about to see my final grades, I am not at all hopeful. I open Mainstreet, find the "grades" section and click "Fall 2020." I see Bs for both of my science classes... I guess I am not a straight-A student anymore. I feel discouraged and embarrassed. These grades do not reflect the student I want to be.*

What I didn't know at that time is how commonly learners felt like "bad students" during the COVID-19 pandemic and how hard it was for them to come back to in person classes. A study done on 167 Economics college students from Madrid found that students who suffered psychological and physical consequences during COVID-19 had difficulty recovering their performance in the classroom (Ferrer et al., 2023). Worse yet, they were feeling alone; disconnected (Office of Civil Rights, 2021).

*But after thinking and feeling through all of this information, I now look back on my freshman year with an appreciation. I am grateful that I kept going and worked harder, learned from my mistakes, and became the student I am proud of today. The class in which I did the worst that first year was completely asynchronous. We watched pre-recorded videos of the professor talking. The other class in which I struggled badly was set up as a webinar so the professor could only see how many participants there were but not our names and we had no real opportunities to interact with each other or with the teacher. I didn't realize the correlation between the formats of these two classes and my*

*difficulty learning in them until I understood the role that instructional communication behaviors play in achieving success in a classroom.*

Joseph Mazer (2013) surveyed 183 undergraduates across all four grades at a large Midwestern university and measured teacher nonverbal immediacy, teacher clarity, student interest and student engagement. He found that both positive perceptions and the communication behaviors of teachers can play an important role in achieving success in the classroom. Teacher immediacy and clarity can improve students' interest and engagement (Mazer, 2013). Teacher immediacy can be defined as "communication behaviors that enhance closeness to and non-verbal interaction with another" (Mehrabian, 1969, p. 202). These behaviors develop a sense of liking and make it easier for students to approach the instructor (Mehrabian, 1981). Now, I understand better why these classes were so hard for me freshman year: the lack of teacher immediacy contributed to an environment in which it was challenging to develop any kind of meaningful relationships with the content, my classmates, or the teacher.

*Starting my sophomore year, I still feel disconnected. Students and professors alike are still not used to social interaction. That's clear behind the masks, in the quiet rooms. But I also feel more hopeful. A majority of my classes are in person and that is already a better start than last year. I am very anxious about being back in person but I understand that I am not alone. Slowly, I start to feel more comfortable in my classes and push myself to participate in conversations. One of the classes I work to achieve this in is my first in person communication class, Communication Theory. It is a big class in a relatively small classroom so it is packed. I sit in the front of the class which makes me feel nervous at first but it's easier for me to participate because I don't have to think*

*about how many people are sitting behind me. I want to do really well in this class because I know it is important for my major. I come to every class prepared, doing the readings and taking notes. So when the professor asks the class a question and the whole class goes silent for an awkward amount of time, my heart starts to race and I will myself to raise my hand and answer the question. It's a step in the right direction and after I participate the first time, every time after that feels easier.*

Classroom participation improves students' communication skills and leads to more academic success (Frisby et al., 2014). In addition to classroom participation, there were other strategies within this classroom setting that were positively impacting me, but I only realized it until after my time as an observer. One such strategy is instructors knowing and using students' names, which "cultivates a welcoming, inclusive, and equitable classroom environment" (Tanner, 2013, p. 329). In addition to this, it is helpful when instructors create opportunities within the class for students to work in small groups, which creates a feeling of "inclusion, community, and collaboration for students" (Tanner, 2013, p. 328). Before taking this class I hadn't made any friends that had the same major as me. But with the focus on small group work within this class environment I got close with the people I was working with, especially one classmate that I continued to stay in contact with. Working with this classmate made me more excited to go to class, made the classwork easier and allowed me to feel more comfortable going to future communication classes that this classmate was in.

After being a part of this class environment, I felt that I was transforming into a much more confident student. By my second semester of sophomore year I felt that things were gradually returning to normal.

*This semester I'm taking a class on interpersonal communication in everyday life. The course topics really interest me because I can relate them back to so many different relationships within my own life. One particular lesson that is still sticking with me is the importance of interpersonal communication when interacting with people that you don't agree with. Before coming to college I felt like the people around me all had the same views on issues and I never felt like my views were challenged. But at the University of Maine, I met a lot of different people who had a wide range of beliefs. Looking back, I realize that before taking Interpersonal Communication, I felt very defensive when I communicated with them.*

Research shows that people seek out conversations with others who agree with them (Byrne, 1961). A majority of our everyday conversations surround discussions with people who share our viewpoints. However, when disagreements arise within these conversations and we don't agree, tensions can occur (Schudson, 1997). But, in *Interpersonal Communication*, I learned the value in being open and vulnerable in difficult conversations: "When we explore and express our thoughts, feelings, and experiences we might understand ourselves, as well as others better" (Allen, 2011, p. 3). Because of this class and connections I was able to make to other classes where we discussed similar themes, I approached all my interactions with more of an open mind and appreciation for being able to have these conversations. Being able to learn things in class and then relate them to outside experiences was something that I had not truly experienced before. I grew an understanding of how important these connections can be in a classroom setting, and when it came time for me to participate in classroom observations, this understanding allowed me to be more aware of the presence of such

space in which students are able to connect their learning to their own life experiences. A section of the observational protocol that we followed asked us to look at if “instruction is contextualized in students’ lives, experiences, and individual abilities.” My personal and recent classroom experiences allowed me to effectively and critically analyze if and when this was brought up in instruction.

Research on student learning can help to further explain why contextualizing instruction within students’ lives is important. Mazer (2013) found that higher interest in a course leads to greater success in the classroom. This rings true to me: In *Interpersonal Communication*, I was so interested in the topics being discussed in this class that I felt more motivated to talk with the professor more and contribute more in class discussions. I developed a relationship with this professor where I felt excited to go to this class and interact with them.

This felt like the complete opposite of what I had experienced the previous year and I finally felt more like I belonged at college and in my major. Positive instructor communication and teacher/student relationships attributing to student success is seen across a variety of different studies (Honeycutt, 2008; Fualker et al., 2021; Mazer, 2013). For example, according to a study analyzing the findings from a Gallup-Purdue Index, researchers found that students who have more interaction with faculty members tend to have an easier time being integrated into college social life and do better academically compared to those students who report less faculty interaction (Raposa et al., 2021). Reflecting back on not only this class but this semester as a whole, I felt like I experienced a breakthrough as a learner. I felt more motivated and confident in myself and I finally felt like what I was studying was meaningful to the world around me.



This transition was really important for me because it encouraged me to seek out other opportunities and experiences outside of classes that related to my major. After my sophomore year I became much more involved on campus and felt like I had found a community in which I belonged. I can now understand how important being involved in different organizations has been for not only my success in the classroom but my overall well being. The importance of informal social relationships has been proven to be crucial in student success but it is often overlooked and focus is put onto formal academic support (Thompson, 2008). This study done by Blair Thompson used a diary-interview method in which students kept a detailed diary before their interviews and where grounded theory was used to analyze the data from the interviews, found that when students work with each other on course material outside of the classroom they believe they are able to learn the material better. As students provide academic support to each other, they strengthen their bonds, opening possibilities for other types of supportive interactions to occur. Developing these connections with classmates that lead to relationships outside of the classroom has been so crucial for me in not only finding academic success, but in improving my overall well being by providing me with a social outlet.

Learning and reflecting on my experiences of being a part of different campus communities has shown me how important involvement is for students. An experience that has been particularly rewarding and contributed to my success in the classroom in a variety of ways is being a part of the student-run radio station. Not only do I get to play music that I love on air for listeners but I am also connected with a group of people that share similar interests with me.

*Almost every show, the phone in the station rings. I get excited that someone is actually listening and cares enough to call. I also know who the caller most likely is but I still am excited. I answer the phone, "WMEB, this is Hope." A man responds, "Hope! I love what you're playing, are you taking requests?" I say, "I am! What can I play for you?" This time he requests Bedroom Eyes by the Dum Dum Girls. I tell him I'd be happy to play this for him and he tells me to keep up the good work. I smile and feel happy to have a new song to play that I have never heard before.*

Pretty much without fail this man calls my show every week to request a different song. These interactions have been so important for me in grasping how far and wide the music I choose reaches. Understanding the importance of these experiences has helped me to encourage my younger sister and other freshmen that I have met to branch out and join an organization that they are interested in. Through my research on student success, I have become a better leader and mentor because I feel confident that the advice I give students on building relationships with instructors and getting involved on campus can make a real difference in their lives and their future. Although instructors are not solely responsible for helping to provide encouragement to students to pursue opportunities outside of class, they are in a unique position to help students tap into available resources and build a web of significant relationships (Felton & Lambert, 2020). It's important to acknowledge how learning in the classroom and learning among other community outlets feed into each other, noting that instructional communication is not contained within classroom walls.

The breaking down of typical patriarchal norms of where, how, and among whom learning should happen can be considered a form of "queer communication pedagogy"

(QCP) (Atay & Pensoneau-Conway, 2018). QCP aims to deconstruct power structures within and outside the classroom, and bridges the gap between the classroom and other spaces where learning actively happens (Atay & Pensoneau-Conway, 2018, p. 8). QCP works to “un-mainstream the mainstream” by using different teaching strategies that give marginalized students a voice and focuses on understanding the experiences of students as they interact within educational settings (Atay & Pensoneau-Conway, 2018).

Being able to reflect on instructional communication and learning as it happens in different places has empowered me as a student in the classroom and beyond. I have developed my agency as a learner and as a person within the UMaine community that has allowed me to make my mark in a meaningful way. I know these experiences will remain memorable as I continue on into my future and interact with different people and communities.

\*\*\*

*Dear Hope,*

*I know how hard freshman year is for you. I know that you miss mom, dad and Mae and how hard it is to make friends when there's nothing you're allowed to do. I know you're worried about getting sick and getting your roommate sick and how hard it is not to think about that all the time. I know the food sucks and how it's frustrating not being able to eat in the dining hall. I know how different this is from the college experience you thought you were going to have, but I want to tell you that it will get better.*

*Eventually, you will go back to having regular classes and be able to interact with your professors and meet people in your classes. I know how hard your astronomy class*

*is and how stupid the lab is. But I want to fill you in on a little secret: you don't need astronomy in your future classes:)*

*I want to tell you that you're not alone. I want to tell you about how many other students struggled during the pandemic. I know you're disappointed about your astronomy grade but you need to know about many other students who experienced similar drops in their grades. How there were also other students who felt disconnected and lonely and struggled to find people to turn to for help.*

*Hope, though it may not feel like it, you are succeeding. You are learning. There are supportive relationships in your life and you can cultivate more of them. You are finding your own ways of making a difference -- both in your own life and in the life of others.*

#### Learning to Weave: Classroom Observations as Lessons

As an undergraduate student observer on the Gateways to Success research team, I visited numerous intro-level classes taught by Graduate Teaching Assistants (TAs). Observing these TAs and the students in the classroom made the autoethnographic reflections in this and in the previous section possible. As an observer, I also realized how much of a variety there is in teaching styles and how much these teaching styles affect students' experiences in the classroom. For example, a few TAs came across as very informal and relaxed towards their class. My research partner and I observed how many students in these classes were less focused and talked to their peers while the TA was talking.

*I walk into a classroom with my research partner. Most students are on their phones, the TA is on their laptop and some students are engaged in conversations with*

*each other. We go up to the TA and introduce ourselves and they direct us towards the best place to sit and conduct our observation. As the class starts, the TA introduces what they are going to be doing for that day. But many of the students who were engaged in conversations still talk and many of the students remain on their devices. As an observer it's hard for me to concentrate over the multiple conversations, I can't imagine how some of the students that are actually trying to listen feel. I also have a hard time understanding how the TA can continue to talk over them and not say anything to them. After the class, my research partner and I agree about the distracting nature of the class and discuss how we have both had class experiences where the instructor lets students talk over them and it creates a negative learning environment.*

Being an observer was incredibly valuable and educational to me. One of the parts I really enjoyed was being able to actually experience what an in-person first year class looks like, but from the new vantage point of not being a learner in it. Although we did our observations in the Spring, which would have been the second semester for first-year students, it was still interesting for me to see the classroom interactions among freshmen and how TAs were such a big part of their learning development. I hadn't fully realized until these observations how important of a role TAs have in first-year education. GTAs are now teaching large majorities of undergraduate students across the country and because of this, play a significant role in students' learning experiences (Sundberg et al., 2005).

The experience of observing these classes also allowed me to reflect back on teaching styles I have experienced in the past and made it an interesting experience in the current classes I was taking. The same semester that I was doing these observations I was

taking a coding class, with labs facilitated by a TA. Their style of teaching was particularly challenging for me and I often dreaded going into the lab because I didn't understand the material and I often left more confused and frustrated.

*One morning I am sitting in this class and as the TA is showing the code we would need for our class activity, I have my laptop open trying to follow along. I feel overwhelmed because the TA is going too fast for me to understand anything that they are doing and I worry that I won't be able to successfully do the class activity. All of a sudden the TA calls on me and asks what I think would come next in the code. I freeze, my cheeks get red and my heart starts to beat faster. I have no idea and I feel embarrassed for not knowing. I have no choice but to tell them I don't know the answer. I feel discouraged to even continue doing the work because I feel behind in the class for not knowing the answer presented in front of the whole class.*

Encouragement from teachers and students alike have a huge impact on success and positive learning experiences for students in the classroom according to a study by Janet Nora Alexander (2008). Her study consisted of interviews done with college students who had previous negative learning experiences and wanted to be involved in understanding the complexity of classroom strategies (Alexander, 2008). The findings from this study demonstrate that one of the most important positive impacts on students is encouragement from others within the classroom, while discouragement is the biggest negative issue that learners face. Taking this class while doing the observations allowed me to reflect upon the different aspects of the TA's instructional communication that contributed to my negative learning environment. One specific action that I felt contributed to this was when the TA acted annoyed when I wasn't understanding

something. I had no prior coding experience and already felt out of place in this class. I need the TA to encourage me to keep trying and give me step by step instructions. Instead, I was confronted with a quick example in front of the class and the expectation that we could take it from there. It was a really interesting experience to be sitting in a classroom trying to learn from the TA but at the same time, not being able to help but observe them. This experience as a whole helped me to understand better what I needed from an instructor to ensure my success in a classroom: encouragement, empowerment, care and positivity, which were all communication practices that students in Janet Nora Alexander's (2008) study emphasized as being crucial to their success.

The semester as an observer was a really crucial time for reflection and looking back on my memorable experiences, good and bad, in a classroom. It also made me more confident to advocate for myself as a student and communicate to more of my instructors about my learning. After being involved in the observations and starting my interviews during the fall of my senior year I worked hard to build relationships with my professors. One specific class in which I did that was environmental communication. This was a service learning class which meant there was a lot of interaction with the outside community. Service learning can be defined as "pedagogical strategy in which students engage in academically linked community service to enhance their understanding of class concepts while contributing to and learning about their communities" (Dienhart et al., 2016, p.1). Through this class, my classmates and I developed connections with the natural world around us and with the Penobscot Nation. Aside from the service learning aspect of this class, what made it so memorable for me was how I felt I contributed to the class. I felt more confident in myself as a student in class than I ever had before and I

attribute this to how much I understood the importance of classroom contribution to learning. I wanted to learn a lot in this class because I was really interested in environmental communication as a career and this motivated me to interact with the professor in meaningful ways throughout the semester. Without my prior experience as an observer I don't think I would have put as much effort into this class as I did and because of this it wouldn't have been such an incredibly valuable experience for me.

Through these observations and my research I have come to understand the true value of making connections with people you work and learn with. Over the course of the last year I have strived to strengthen the current relationships I have built while in college and create new ones. One important relationship I built throughout the observation was with my research partner Ian.

*It was Ian and I's first observation together and I felt nervous. I had never done any kind of research and I had only met Ian twice before this. We decided to meet 10 minutes before the class started to organize our process and walk into the class together. I started to feel more comfortable around Ian as we talked just the two of us because he expressed to me that he had also never done research before but was very excited about it and that made me more excited. After our observation we sat down together and went over what we both observed. Ian talked a lot but I appreciated that, he observed a lot of interesting things that made me think back on what I had observed and see it in a different light.*

The reflections after the observations started to become the most valuable part of the whole experience for me because Ian and I were able to have such detailed conversations about what we were observing and what we thought that meant. Reflecting



back on these interactions and the relationship I built with Ian I understand how crucial it was for our findings and for my own personal learning experience.

Looking back on my first-year, I remember feeling hopeless about my future in college. The only connections I had made were with students in my dorm building. Of course, these were incredibly important to me and still are, but there was something missing. But as I have grown as a learner and as a person throughout college, I feel fulfilled with the many connections I have cultivated across different environments. Developing this “web of relationships” with a vast group of people with different interests and talents can enrich students’ experiences in the diversity of their interest (Humphrey et al., 2023). I have come to better understand the diverse possibilities that are available to me through the connections I have worked to develop.

Through this process I have pushed myself to reach out to individuals that work in the field of communication. This is something that would have really terrified me my freshman year. But I now have the confidence to talk to these professionals and learn valuable knowledge from them. I now feel like I have a network of resources that I could turn to for advice.

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*Dear Hope,*

*It’s your sophomore year and I know you’re nervous. You feel like you don’t have a professor or any adult figure, for that matter, to turn to for advice. You have no idea what you could ever do with a communication degree, which terrifies you. I know that you miss the connections you had with your high school teachers and that you could really use that kind of relationship right now.*

*I want to tell you that it's still early in your college career, that it's okay that you feel uncertain about your future and that you will eventually build strong relationships with faculty. I know it was impossible to build any sort of lasting connection with the professors you had over Zoom last year. But you start in person classes this year, this will change your experience and your confidence in yourself as a student to a whole new level.*

*You don't know this yet, but soon your whole view of your educational experience will change by an opportunity to be an observer on a research team. Now I know what you're thinking... RESEARCH?! I would never do research! But as it happens, you do great at it and you learn more about yourself through the process than you ever would have thought possible.*

*Hope, you will become a wonderful advocate of your own learning and you will feel stronger for it!*

#### A Tapestry Begins to Appear: Learning to Learn

By engaging in guided classroom observations and related reflections, I have developed the competencies for observing instructional communication that have supported me in becoming more involved in my own learning and having both higher stakes in it and more ownership of it. When students feel like they have a voice in the classroom, it shifts the power dynamics between student and instructor, allowing for students to feel like what they say matters and developing a learning environment that is centered around equity (Cook-Sather et al., 2014). Taking part in observations and reflection has demonstrated to me that this shift in the traditional forms of teaching to a more equitable, inclusive classroom can have profound effects not only on students but

teachers as well. This shift can change in “deep and productive ways both how educators understand the teaching and learning process and their role in it and how students take up their education and their relationships with teachers within it” (Cook-Sather et al., 2014, p. 195). When students are given the opportunity to provide feedback and reflect with instructors about their teaching, it opens up new perspectives and allows for teachers to see their pedagogical strategies in a new light (Cook-Sather et al., 2014).

Taking part in these opportunities has also given me a new look on my learning and has allowed me to grow my metacognitive competencies. Engaging in metacognition as a student cultivates a better understanding of what I am missing as a learner and what I need to receive as support in order to succeed (Wang et al., 1990). Instructors can play a role in encouraging metacognition within the classroom and grow the confidence in students to become more effective learners (Stanton, 2021). Being involved in observations and reflection has given me the space to expand my metacognition and understand how relationship building within the classroom is a big factor in this growth. Through this realization, I developed an appreciation for the role of diverse relationships and communities in fostering meaningful learning, which boosted my confidence to collaborate on a deeper level with instructors and to advocate for myself as a learner. Developing this collaboration allows for students to have an enlightening perspective that what happens in the classroom is the responsibility of both the teacher and the student and creates an empowering environment for learning (Cook-Sather et al., 2014; hooks, 1994).

This is also created through the development of relationships with classmates. Strong classroom relationships can work to establish an environment of collaboration where

students feel comfortable working in teams and creating emotional bonds (Zhang et al., 2023). Working in small groups myself and observing students work in small groups has allowed me to understand how valuable this experience is in meeting new people that I wouldn't normally interact with in my daily life and growing my understanding for the community I am a part of. Taking part in guided classroom observations and related reflections, I have developed a stronger agency for myself in the classroom, expanded my metacognitive abilities, and grown an understanding of the importance of building and managing diverse relationships and learning about the communities around me that work to promote meaningful learning.

## CONCLUSION

In this study, I interviewed first-year college students and reflected on my own learning experiences in order to better understand the role of instructional communication in facilitating academic success and belonging. Instructional communication can be defined as “the study of the human communication process across all learning situations independent of subject matter, grade level, or the learning environment” (Myers et al., 2016, p.13). This study shows that it is clearly something that both learners and educators engage in and that it plays a crucial role, with the possibilities of both positive and negative impacts. Furthermore, the thesis considers specifically the role of TAs in facilitating undergraduate education and how and why their preparation should include culturally-responsive approaches to instructional communication. In recent years, universities' reliance on TAs has increased drastically but even with this growing number of TAs, very few of them have had prior teaching experience or receive pedagogical training (Schussler et al., 2015). Additionally, there has also been an influx of international graduate students within the United States (Adebayo & Allen, 2020) with many being enrolled as TAs (Gorsuch, 2003). Challenges for international TAs go beyond pedagogical training and are related to not understanding the US educational and social system (Williams & Case, 2015).

Overall, findings from this study demonstrate the impactful role that TAs play in first-year undergraduate education. Due to this, it is crucial that TAs are aware of their importance and are given the necessary training that includes explicit consideration of instructional communication. Findings also demonstrate how aware undergraduates are of how communication impacts them within the classroom. These demonstrated levels of

metacognition convey the need for more opportunities to be given to students to reflect and discuss their learning experiences across all disciplines. Additionally, providing more programs for students to engage in classroom observations can work to grow students' confidence in themselves as learners and opens up the door for more conversations between teachers and students on creating more equitable classroom environments.

### Implications of findings

The findings have implications for the future of education in moving away from the traditional power dynamics of instructor and student and opening the door for more student voices to allow them to express their feedback. Giving students these opportunities in the classroom shifts the power dynamics and makes students feel heard in a way that empowers them as a learner and a person (Cook-Sather et al., 2014). But in order for this to happen, instructors, and in this study specifically TAs, must understand the importance of student voice and equity within the classroom. Given the difficulty of the college transition of first-years (Giddan, 1988) and the rise in TAs being responsible for teaching many first-year classes (Sundberg, et al., 2005), it is more important than ever that TAs are given the training to understand this. The implications of this study show that future TA pedagogical training is crucial across all disciplines and should include explicit consideration of instructional communication. Presently, GTA training often solely consists of department-wide, generalized workshops focusing on policies and procedures rather than pedagogy (Shannon et al., 1998). What this study demonstrates is the need to go beyond basic policy and procedure. Findings convey the need to incorporate TA training that includes looking at ways to navigate the relatability-authority dialectic tension and cultural expectations of the student-instructor relationship

within class contexts and relationship-rich education. Findings from this study also lay out the need to provide TAs with the essential skills in being able to navigate the tension between metacognitive and socialization advantages of, on the one hand, small group work, and on the other, task-distraction. Furthermore, it's crucial that the role of GTAs being both students and educators is not understated and that training can draw on their experiences as learners and have them reflect on these experiences. These dual roles put TAs in a really unique position to help them connect with students on a deeper level that full-time faculty may not be able to. Learners' metacognition can also be beneficial to TAs as learners and providing these opportunities to expand TAs metacognition will allow them to implement those skills into their own classrooms. Lastly, based on findings that students' tend to compare their most recent learning experience to their current one and recognize what works for them as learners, TA training should also incorporate familiarizing graduate students with the current k-12 system. As well as allowing for the development of strategies through which TAs can understand from students about their past learning experiences and what has worked and not worked for them.

In addition to TA training, findings indicate that providing training for learners on thinking about learning and communication outside of just the subject can allow them to be more in control of their own learning. Allowing for these opportunities gives students the chance to grow their metacognitive abilities. Studies demonstrate that when students are encouraged in the classroom to build their metacognition, it empowers learners to grow confidence in themselves, understand what they do not know and become more effective learners (Stanton, 2021; Wang et al., 1990). Due to this it is crucial that within

first-years experiences there are more opportunities incorporated in their curriculum that allow them to reflect on their learning experiences.

Findings from the autoethnography have further implications on practices to grow students' self-efficacy in the classroom. By engaging in classroom observations, students can be more involved in their own learning and take ownership of it. These findings suggest the need for more programs that allow for students to participate in observing teaching and learning. When students are given the opportunity to engage with their instructors on this level and provide feedback, it is not only beneficial for the student but for the teacher to see their own pedagogical practices in a new light (Cook-Sather et al., 2014). Increasing these opportunities will allow for students and teachers alike to participate in more inclusive practices that lead to a more equitable classroom environment. Opportunities for growing metacognition and ownership of learning include an orientation or first-year course on learning that involves students being able to participate in classroom observations. It could also include more scheduled one-on-one student and instructor conversations that are centered around what is working for them in the classroom and what is not, as well as in class activities that allow for students to discuss their learning with classmates outside of class content. These conversations and observations would not only be beneficial for students but also for instructors in thinking of ways they can expand their pedagogical strategies to include all students.

Student success should be seen as the most important outcome of a classroom experience (Hirschy & Wilson, 2002). Campuses should be responsible for making this a priority (Hunter, 2006). However, “research, consulting and graduate instruction have become so absorbing for faculty that concentration on undergraduate instruction is not



what it used to be” (Kerr, 2001, p. 49). Implications of these findings demonstrate just how important focusing on lifting up the voices of undergraduates can be for the future of education. Empowering these students will come from providing training to the TAs that teach them and giving them spaces to engage with their instructors as equals.

### Limitations and Future Research

Within the scope of this study there are limitations that should be addressed. Due to the small sample size and interviews taken at a predominantly white rural public institution, it’s important to note that this is not representative of all students. Some of the strategies that worked for many of the participants might not work for others and that is not fully represented in this study. Nevertheless and especially because different contexts and different learners bring different knowledge, it is important for researchers to consider students' discourses of teaching and learning as important, informative, and impactful (Hinck & Tighe, 2020).

Additionally, the courses that participants were interviewed from are all coordinated by full-time faculty whose philosophy of teaching is already attentive to relationship-rich education. This is not the case for all students but it can speak to the power of TA coordinators’ shaping future educators by centering relational learning. However, it is still important to acknowledge how student experiences should be studied across a range of all courses and how faculty coordinators' philosophies of teaching should be considered as a potential factor.

Although this study has demonstrated the knowledge and understanding that students have towards their own learning abilities it is important that more research be done that honors this through inclusive research methodologies. Dialogue centered

around discourses of teaching works to build students' understanding of what education means to them, understand how their classmates view education and allow the instructor to discuss their own views of teaching and learning (Hinck & Thige, 2020). Within the field of instructional communication, qualitative research is critical (Conley & Yun, 2017) in allowing for more in-depth explorations of meanings and in highlighting students, both graduate and undergraduate, as knowledge partners and collaborators in their own learning, rather than only recipients of education.

Building off these discourses, there must be further research that opens up more space for diverse voices and perspectives to be heard to work to further develop teaching strategies that create an equitable learning environment for all. Denial (2019) describes this as a “pedagogy of kindness.” Future research with students must incorporate this pedagogy where the researcher interacts with participants as collaborators and builds trust. Education is always changing and needs to be continuously transforming and students can and should be part of that change.

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## APPENDICES

### Appendix A: Description of Approaches to TA Preparation in the Courses Participating in this Study

#### Molecular and Biomedical Sciences

The graduate teaching assistants in Molecular and Biomedical Sciences have some departmental training they do as a group in regards to safety and overall requirements for the job. We do have two graduate coordinators in the department that will assist students with courses and transitioning into the department and University of Maine. For BMB209, we have weekly meetings where we discuss ourselves, our background, and challenges we are facing during the course of the semester. In terms of teaching approaches, we talk about active-learning, relationship-centered teaching, and anti-racist teaching pedagogy. We also discuss course content and strategies that have worked in the past to teach content and manage student conflicts. We do have two graduate coordinators in the department that will assist students with courses and transitioning into the department of Molecular and Biomedical Sciences and University of Maine (Jennifer Newell, 2024, personal communication).

#### Biology

The graduate teaching assistants (TAs) in the School of Biology and Ecology do not have departmental training. Our full time teaching team runs all of the trainings for safety, content, and pedagogy. We do not have transitional support for graduate students new to UMaine beyond the support that individual academic advisors and International Programs provide. For BIO 100, we hold weekly meetings where we model the pedagogical approaches that we want the students to experience. TAs role-play the

activities, rotating as "TA" and as "students," and we constructively critique and problem solve challenges that come up. We break-out the TAs by lab table and by the weekly lab activities, and they brainstorm facilitation approaches for each activity, then they share out their ideas, and TAs collectively add other input and have the opportunity to ask each other questions.

Because this is uncompensated service labor for faculty mentors and our training time is limited and constrained by the need to focus on content, relationship-centered preparation has suffered and is done on an ad-hoc basis. Building supportive and diverse relationships in this space is admittedly a challenge. TAs seem to segregate by discipline, or prior friendships. We often ask that they move seats so that they can begin to build relationships with other TAs that they're not already acquainted with. We are transparent in why we choose the learning tools we do, how we intend for the approaches to be active, anti-racist/sexist/-ist, and to improve relationships in the classroom. When conflict arises between TAs and students, I model conflict negotiation approaches so the students and the TAs can all learn from the experience.

#### Communication and Journalism (CMJ)

The CMJ Department has a TA Coordinator who designs and facilitates pedagogical training for the 14-16 TAs teaching CMJ courses each semester as instructors of record. The TA coordinator develops curriculum and resource materials for the three courses staffed primarily by graduate students (CMJ 102, CMJ 103, and CMJ 106). TAs receive a ready-made curriculum for the course they are teaching, including weekly lesson plans and BrightSpace content they can copy into their respective shells.

As their teaching experience grows, most TAs adapt this curriculum and the daily pedagogical approaches to their styles, goals, and philosophies.

The TA Coordinator also facilitates several specific training opportunities. First, prior to the Fall semester, there are course specific instructor meetings for TAs to meet each other, overview each course, the materials needed, and available resources. After this, CMJ TAs participate in a 3-day departmental orientation in the Fall, which combines general topics about graduate school with pedagogical training, preparing instructors for their first week of class. The orientation includes teaching demonstrations and peer instruction. Next, several department colloquia in September focus on teaching issues, including supporting students and building a teaching community. Lastly, for each of the three courses taught by TAs, there are weekly instructor meetings, where we address questions arising from classroom experiences, review goals, content and activities for the coming week, and, again turn to peer instruction to share ideas for teaching each course. Prior to Fall 2024, all beginning TAs were also required to enroll in a 1-credit graduate course, called Teaching Communication in College. Beginning Fall 2024, in place of this course, there will be online resources and expectation to participate in the GTA-focused programming offered through the Center for Innovation in Teaching and Learning.

Because there is a dedicated faculty member supporting TA pedagogical development in CMJ, we also have a variety of settings and opportunities to not only mention the importance of relationship-rich education, but also to cultivate practices that support it over time. In addition to the ones described above, the department has a faculty-to-TA and peer-to-peer observation and feedback processes, also organized and supported by the TA coordinator. Most important, however, are multiple formal and



informal (TAs share offices) opportunities for peer exchange and reflection in relation to teaching, where TAs can be honest about issues of power, the pressures they feel as both graduate students and instructors of record, intercultural challenges encountered, etc. This peer support network is invaluable for both undergraduate education and TAs' wellness and sense of belonging. (Liliana Herakova, 2024, personal communication)



### Appendix C: Interview Questions

1. What has your experience as a UMaine student been like so far?
2. Can you tell me about the class where you heard about this study - how would you describe your overall experience and what is learning there like?
3. How would you describe the TA's overall approach to the course?
4. How would you describe the overall sense of belonging and connection in that classroom? How is that similar and/or different to other classes you are taking?
5. Can you share any specific examples of positive or negative interactions or experiences you've had with the TA?
6. How would you describe the TA's communication style? Do you feel comfortable approaching them with questions or concerns?
7. Are there any specific actions or behaviors of the TA that make you feel more engaged or less engaged in the classroom?
8. How have the TA's efforts to build relationships and create a supportive environment affected your learning experience? Please provide examples if possible.

Appendix D: Code Book

<b>Code name</b>	<b>Description</b>	<b>Representative Example</b>	<b>Category</b>
“Meet people” +	Participant talks about making connections with others learners as a positive experience	Personally, for me, it has been a good experience, because I did the RLE week so I had a whole week before to like meet people which is really beneficial for me.	Classroom environment & peer communication
Class scheduling		I don't think I've had an issue with class scheduling or anything like that so far and I made like my routine.	Institutional factors
Naming personal preferences	acknowledging what is important for the individual	And also I'm just like a person who likes meeting new people	Agency
social personality makes class easier	Participant talks about how liking interactions with others benefits them in class	So it's really easy for me with the classes	Agency/self
doing kahoots in class	Participant remembers doing kahoots	We do a kahoot after we study like material. We do a slide show, and then she'll do surprises after the kahoot.	Classroom strategies
Consistent teams	Participant has worked with the same people the whole class	So on the first day I sat with like 2 other people, and for the entire time I've sat with those 2 people,	Classroom setup
Classmates working together +	Participant discusses how working with classmates on in class assignments is beneficial for learning the material	And so for my like little table, we work together on most of the assignments that we have in class which I really like, because I like working with others. I feel like it's more beneficial for me when I'm learning the material.	Peer communication
Whole class discussions +	Participant discusses how whole class discussions are important in hearing perspectives	And then we also will have like class discussions as a whole, which is really important, because then you have, like other people's perspectives	Classroom strategies
Learning due to class discussions	Participant talks about how class discussions and hearing other classmates perspectives benefits their learning	And also that's like part of the lab manual that we do for bio is we always have, like a class discussion within the material and so I learned a lot from that.	Classroom strategies
Personal reflection	Participant discusses how in-class writing activities	And the lightning write is just writing down every single thing	Classroom strategies

	help reflect on what you do and don't know	that you're learning within that, like the last week that you've had. So it gets to have, like all the information that you learned just like jotted out and that like creates a space for you to just kind of see what you know and see what you don't know	
Comparing learning with classmates	Participant discusses how sharing personal reflections helps to relearn the material	Oh, what did you learn? And then I get to be like, Oh, wait! I didn't know that, so I'll go back and I'll look at the notes or do something like that, or look at the reading that we had to do	Classroom strategies
Report out to class	Participant reports on on a specific topic every couple of weeks	once every couple of weeks we'll do a report out on a specific thing that we did within those couple of weeks. So for the first one, it was about a project that we were doing, it was about like. we're doing a research project on one specific thing about like biomass. And so mine is about how like water affects grass growth. And so then we did a report out on that.	Classroom strategies
Reporting out holds students to a higher standard	Participant says that reporting out holds them to a higher standard to create higher quality information	I think it has like a higher standard when you're talking in front of people. And so I actually had to like, make sure everything was correct, and, like all my resources, were right and everything like that. So I didn't want to look like a fool in front of people. So I think it's like a good and thing to set up for like students to do that. So then they like have valuable information instead of something that they're just trying to get done for the class	High standards
Teacher ensuring confidence in students	Participant says that their teacher makes sure they feel confident	And also my teacher is really good about making sure that I feel like confident and not like I'm being like super graded, because even though they're graded like, the teacher will always be like, okay, so did you mean by like this? Or did you mean by that like kind of like helping me out while	TA communication

TA makes students feel comfortable	Participants says that when they are reporting out to the class, the TA makes them feel comfortable	doesn't make us go up in front of the class and make us feel uncomfortable with their report outs or any of our homework stuff,	TA communication
Lenient approach to course	Participant describes TAs approach to the course as lenient which is described as both good and bad	I would say she's kind of lenient, which is good and bad sometimes, cause I feel like sometimes she's just kind of reading off of what we're supposed to be doing, whereas, like she's not really knowing what we're supposed to be doing.	TA approach
Relays information	Participant describes how the TA just reads off a paper what the class should be doing instead of seeming like they know what class should be doing. Participant says this makes it more difficult to learn the information.	we really have to read the Lab Manual to get the information that we need, or like the homework that we're supposed to do instead of her kind of just telling us	TA communication
Skipping over material	Participant discusses how the TA will sometimes tell the class to skip over certain things and it makes them worried that they might be missing info.	we did an assignment, and it was good because we don't have to really like do it. But we were supposed to do it. But she was like, Oh, honestly like, we can just skip this part like it doesn't really mean anything. But I feel like we might be losing information by doing that.	TA approach
Knows everybody's name +	Participant says that it makes them feel like they belong more in that class because the TA knows all the students names	I actually think that I have a good belonging in that classroom my TA makes sure that she knows everybody's name, since, like the first day we went to class, which I think, like other classes that I have, don't do that at all. I don't think a single other teacher knows my name, and I have like 6 other classes.	TA communication
Asks about life outside of class	Participant says that TA asks them about your weekend which makes them feel like they they have a better relationship	She asks about us like she spends time at the beginning of class, like, you know, asking her weekend when and you know, asking how we are. So I feel like, you know, I do know she she cares like she's not just completely you know, like	TA communication

		ignoring us. But I yeah, so I feel like, she does try to like create, like some like personal connection with with us	
TA is approachable	Participant feels like they can ask the TA anything	With her, I could like say the dumbest thing, and I feel like, totally fine doing it.	TA communication
TA talks about their own life	Participant says that when the TA talks about their own life it makes them feel more relatable	I feel like she's just really relatable because she'll talk about her own life.	TA communication
Outside materials	Participant says that TA will give the class study tools and outside materials that they could be useful to them	We had to write a research like report, and she, like, gave us examples of the like what to write and stuff like that from her own knowledge. It wasn't even from the course.	TA communication
TA is too relatable	Participant discusses how sometimes the TA can take being relatable too far and made students worry	TA will say things like "I am just doing this so I can go the next step of my life"	TA communication
Step-by-step	Participant says that TA will go with the pace of the class	Go step-by-step through the lab manual	TA communication
Gives worksheets but doesn't explain it	Participant discusses how the TA will only explain the worksheet if groups ask	she doesn't first explain it. She kind of lets us do it. and then she'll explain it if we need help. if it was a harder course then I wouldn't like it, but because it's kind of straightforward. I'm totally fine with it.	Classroom strategies + TA communication
TA walks around class	Participant says that the TA will walk around during class and make sure students are on the right track	she walks, she walks around the classroom, and just checks in on all of us to see like how we're doing like what we're doing and like if we're using our time wisely, and everything	TA communication
TA sends individual emails	Participants says that if a student has a question the TA will send them resources specific to helping them which provides more clarification	When student was struggling with making a graph the TA emailed them resources about how to fix their graph	TA communication

Asking for help leads to more success in class	Participants says that being able to approach the TA so easily with questions has helped their achievement in that class	Well, I think that if I was in a place where I was super scared to ask questions and worried to feel like dumb, or anything like that. Then I wouldn't be able to have such like achievement in the class, because for me especially, I will always like ask for help.	Student agency
Allows for mistakes	Participant discusses how they appreciate that the TA allows them to make mistakes and will still give points for wrong answers if they fix it with the TA	I think I submitted something like completely wrong, and she gave me the points, but then also asked me before, like asked afterwards, and was like, By the way, you did this wrong, like I gave you the points because I don't want you to suffer in the class, but I also just wanted to make sure that you redid it.	mindset
Small lab allows for more talk through	Participant likes to be able to talk through questions and feels it is easier to do it in the smaller lab then than the lecture	instead of just telling me I did it wrong. She'll like actually talk through with me and like she won't just be like, Oh, you can't fix it, or you can't like redo it like other classes.	Classroom setup
Confidence to ask questions in front of class	Participant says that the small size of the lab makes them feel more confident to ask questions in front of the whole class	I feel like I could literally raise my hand in front of everybody, and I'm not scared to do that, whereas the lecture I'm like, oh, like I might as well just ask my friend instead.	Classroom setup
College is a really big change	Participant says that coming to college has been a really big change for them because they are not from in-state	it's been a really big change, cause I'm not like from maine. So that definitely kinda has impacted things. And I feel like when I came here, a lot of people already kind of knew each other. So it's kinda like, Oh, let me like try and find a group. But everybody already has a group.	College transition
Difficult to make friends	Participant says that is has been difficult to make friends because it seems like everyone already has a group	But it's been a really big change, cause I'm not like from maine. So that definitely kinda has impacted things. And I feel like when I came here, a lot of people already kind of knew each other. So it's kinda like, Oh, let me like try and find a group. But everybody already has a group.	College transition



Expectation different from reality	Participant says that the way college is portrayed on social media is a lot different from their experience of feeling homesick	I definitely made some friends, but you know not as many as like, you see, like the college experience a lot of people have like big old group of friends that you make instantly. And then you click, whereas it's kind of like, oh, I have like a couple of like friends who are so pretty close, and it's good.	College transition
Classroom environment +	Participant says that the TA makes the class not feel overwhelming	Always advocating kind of for the student, and I feel like he makes everything in a way that it's not overwhelming, but it's also not like, Oh, you can just do whatever you want like. It's not like, oh, we could just slack off all class. No, it's like definitely still, like the lab, and it needs to be professionally done. But it's you know, it's like done in a way which is fun,	TA communication
TA advocates for student	Participant says that the TA always wants to put the students first and advocates for them	he's very open and very like, okay, like, I'll answer everyone's questions. I'll do this. I'll do that. Always advocating kind of for the student, and I feel like he makes everything in a way that it's not overwhelming,	TA communication
lab depends on lecture	Participant says that the difficult of the lab depends on the content of the lecture	If we got to the concept that we're learning in lab, it's perfect. And then sometimes it's kind of difficult, because we haven't gotten to that part in lecture	Classroom setup
positive approach to course	Participant mentioned often how the TA always approaches them with a smile	you're gonna have this for the experience like you're actually going to learn. It's not just about getting the good grades	TA communication
not similar to high school	Participant says that the lab is different than high school in terms of not knowing anyone	I feel like it's pretty good, because I'm still not used to being in school. It's definitely not as like it would be. Say in high school, where I've known all these people for like many, many years, but it's definitely not bad. some of the students are obviously still like clicky like they go with their own little groups. But if I needed help, I can still like, have faith that like,	College transition

		Oh, okay, people can like help me out, and people are kind enough to do that.	
hands on work develops more of a bond within groups	Participant says that doing hands on work develops trust and allows you to get to know the people you are working with better	So it's a lot of hands on like you kind of need to know the people who you're around, and you definitely need to like trust them. Because if you mess up one step and you have to start all over. So it's definitely I feel like a more sense of like belonging with your groups.	Peer communication
TA shows patience when students are confused	Participant says that they ask a lot of question to the TA and they never seem irritated	well, just last class we were really confused with our lab, and we probably asked, I swear, like 5 questions, and every single time he he'd come over as soon as he could be okay like, and walk us through it just because we are super confused. But he wasn't like irritated. He wasn't. There was no like, Oh, my gosh! Like you guys again, cause you know, some teachers are like that. But he was very like always approached us with a smile always was like, Okay, let's like, let's work this out	TA communication
confusing communication surrounding hw	Participant says that the only way the TA communicates about hw is writing on the white board so students have to pay extra attention that	sometimes with homework assignments it's a little bit more confusing. He definitely always has things posted on the board, but if you don't see it, he won't really. verbally say it unless you ask.	TA communication
TA shows excitement about course work	Participant says that the TA seems excited to have the students do the lab and answer their questions	He's always smiling with it, like genuinely. And it's not like a weird like. I don't wanna be here, but it's an actual like, oh, like, I'm excited to have you guys do this lab. And I'm excited to like, answer your guys questions, and it's always like a fun. Little, I don't know. Just always very happy approach to it. So I think that's what makes lab very good.	TA communication
good environment helped confusion	Participant discusses how the environment of the lab has been them feel	I definitely think that in the beginning I was a lot more confused with my labs, and I was like, Oh, my gosh! I have no idea	Class environment

	more like they know what they are doing	what I'm doing. And then slowly, I started getting it more and more because the environment was so good.	
Preparation assignment helps understanding	Participant says that doing preparation assignments and questions for the lab helps their understanding	we do practice questions, and that really helps a lot to help me understand. So I feel like the amount of communication that's in the class really helps me.	Classroom strategies
builds relationship between TA and student	Participant says that because the TA is so approachable they make it easy to be able to build a relationship with them	So it's not like she needed to know all of her names so that makes me feel like I belong a little bit more, and then also she'll like, ask us about our weekend, so she'll ask us about our week, which is, I think that's really important	Support
announces repeated questions to class	Participant says that the TA will announce questions they hear often to make sure the class is on the same page	And if, like, say, 2 people have the same question he will announce it to the class. He's like, Okay, I've seen this trend. I wanna make sure everyone's on the same boat.	TA communication
helped with communication skills	Participant says that meeting and talking with new people in their lab has helped their communication skills	So it's definitely helped me to like help with my communication skills with talking with other random people I never met before	Peer communication
lab is more different from the lecture than expected	Participant discusses how as the class has gone on, lab and lecture content has drifted away from each other	I thought that the classes would be a lot more like connected to each other, and they sort of were at the beginning. But I feel like they've kind of drifted from each other. But then sometimes there's parts that kinda go together but both seem like they're like very valuable by themselves, but they just seem very different.	Classroom setup
lab started easy and got harder	Participant says that the beginning of the class felt like high school review but go more challenging and started learning new things	I think it definitely started off pretty easy. Because it was sort of just like learning about like lab safety and sort of getting in the routine and once we got past that it started to get a bit harder, and you were expected to do more on your own. But it's definitely manageable.	Classroom setup
independent work	Participant says that they do a lot of work on their	we've started doing more on our own which is something that I	Student agency

	own which they aren't use to	haven't done before. So it's challenging but interesting.	
class has a routine +	Participant says that the they appreciate knowing exactly what to expect each day	Check in with TA, TA introduces what they are doing that day, sends of students to work	Classroom setup
lab is similar to a high school class	Participant feels like the smaller lab is more similar to high school	The size and the instructor being more available to answer questions	Classroom setup & college transition
engage students in a variety of ways	Participant sights her English class as a memorable class because of the variety of different things they did	Sung Aretha Franklin's respect out loud as a class	TA communication
don't know what they are doing	Participant describes the TA as "frazzled" and says that they don't always seem to know what they are doing	I feel like my instructor is like a little bit like frazzled like a lot like she doesn't always like know exactly what she's doing	TA authority
students argue with the teacher	Participant discusses how a few students will argue with the teacher and the teacher will argue back. Participant says that this is distracting to the class	And I feel like, too like sometimes we waste like a lot of class time, cause you know, these, these one or two, like dominant personalities, will like argue with her about stuff like on the the slideshow or whatever. And instead of just being like, you know, this isn't the time for this, like I'm gonna continue with the lecture. She like, kind of feeds into it. And we'll like, argue back with them.	TA authority & Classroom experience
"teaches us like we're like little kids"	Participant feels like the teacher communicates with the students as if they were in elementary school	like when she wants to like, get our attention, she goes, hey, hey? Listen up! And then like claps, and then like expects us all to like. Say it back and clap, and it's like super odd.	TA communication
work with people with differing opinions	Partians says that they work with people in class that they wouldn't choose to be friends with but it is a respectful class environment and they work well together	I've worked with people in that class that I feel like I definitely wouldn't agree with on like other things, and probably wouldn't. you know, like choose to be like friends with but like I feel like we work together fine and like I felt like they were very like respectful in a classroom setting, and you know, I feel like	Peer communication

		everyone's very willing to like, at least in like a smaller group setting. Everyone's very willing to like, like share and interact with each other.	
students feel comfortable sharing in smaller group settings	Participant says that in smaller groups, everyone is willing to share and interact with each other. They feel like there is more connection in smaller groups	I feel like everyone's very willing to like, at least in like a smaller group setting. Everyone's very willing to like, like share and interact with each other.	Peer communication
graded students work wrong	Participant describes a time where they got a grade back and didn't feel like that was the correct grade and had to bring it up to the instructor	I know she's made mistakes before, so like I now I ever since the first time I like contacted her about that. I feel like, now, I'm like, okay, like I could be. I could be right about this, and I should ask her about it before.	TA authority
TA "talks down" to students	Participant feels like the class is an odd dynamic because the teacher is not that much older than them but talks down to them like they are younger than they are	She kind of like talks to us like we're like. like elementary school kids, which I'm like. I like, I understand, like what you're saying, like, you don't need to do that. So that's really odd to me like that was just super weird.	TA communication
needs to be right	Participant says that the TA will often get into arguments with students and spend the class trying to prove that they are right	I don't know, though, like it was, it was odd, like she just kind of will be like. No, like, I'm right, like, you guys aren't like.	TA authority
more comfortable because the TA is closer in age to students	Participant says that because the TA is closer in age to them they feel more comfortable approaching them with questions or concerns	probably, since she's already like around our age, like I, you know, I'd probably feel a little more hesitant. Maybe if, like, I knew she was like a like, you know older.	TA relatability
very open to ideas	Participant sites their english class as a memorable class where they felt they could talk to their professor about anything	the teacher was very like I don't know how to explain it. She was very open to ideas like we could talk to her about anything. and it just felt like a very good environment. And I was very happy to go to class, you know.	TA relatability

trouble with labs	Participant says that their group has had difficulty understanding the lab	my group especially has been having trouble like getting the labs right? So we have to keep like redoing it. So it's been tough.	
TA breaks down information to be understandable	Participant says that they don't have a background in chemistry the TA helps them break down the information	she definitely kind of like breaks it down more to like for me to understand, because I don't have a very good background in chemistry like at all. So she kind of just like helps us like learn more.	TA communication
approach to course feels unprofessional	Participant feels that the approach to the course is unprofessional in the sense that she is "talking to us rather than talking to a group of students"	I don't want this to be mean, but she has like a kind of non professional look, if that makes sense. So it's more like she's talking to us rather than like talking to like a group of students, you know.	TA approach
see eye to eye	Participant discusses how the TA looks at their students as how they are in their footsteps which makes the students not feel intimidated and see eye to eye	helping us out like she kinda looks at us like how she was in our like footsteps, you know. So it's very like. I guess we see eye to eye, you know.	TA communication
class moves very fast	Participant has a difficult time grasping the concepts so feels like they are "trying to learn in the background"	especially we move so fast that, like I kind of feel like, I kind of just stand back and kind of try to learn in the background. But I'm kind of like, you know, on the side.	Classroom setup
talks more on one to students rather than the whole class +	Participant says that they appreciate being able to talk one-on-one with the TA more	it's more of like a one on one rather than like talking to like a classroom, which is really nice and helpful.	TA communication
class goes together	Participant says that there isn't an opportunity to fall behind in the class because they go together	I don't really think that I'm behind in that class, because we kinda just keep going together. So there's not really an opportunity to fall behind, you know, like cause we all get our stuff done right then and there, you know.	Classroom setup
Focus causes lack of communication between students	Participant says that students are mainly focused on getting their lab done and leaving	It's kind of hard. There's some people that I feel like I could talk to if I really wanted to. But I think we're like so focused on the	Peer communication

	early that they don't talk a lot	lab that there's no real time to communicate with others.	
Communication leads to opportunity for mistakes	Participant mentions how they believed if there was more talking to each other during labs, students wouldn't be attentive and would make mistakes	there's no real like chance to like talk to others, or like form any like friendships or anything, cause you're mainly focused on your lab and getting it done leaving early	Peer communication
work on my own -	Participant says that coming into college they are expected to do a lot of work on their own	he teachers kind of just post Powerpoints, and then we're expected to learn them, which is sometimes frustrating	College transition
available resources	Participant says that there are many resources around them on how to study and how to get help	there's a lot of resources on how to study and like how to get help if I need it. So overall it's been really good.	Support
large lectures make memorable experiences difficult	Participant says that it's hard for them to have an "Aha! Moment" in a lecture hall with so many other people	I don't think that there's any like PIN point experience, because I mean it's all in big lecture halls, so it's hard to have like that. Aha! Moment when you're in a lecture hall with a whole bunch of other people.	Classroom environment
liking hands on experimentation	Participant says they like the lab because they like "mixing the chemicals and watching things happen."	I like the chem lab because I don't know. I like mixing the chemicals and like watching things happen.	Classroom strategies
lack of organization	Participant says there is disconnect between what they prepare for lab before hand and what they do in the lab	"We have to write down the lab report in our lab notebooks beforehand, which is fine. But we get to class. And whatever we wrote down in the lab manuals is actually different from what we're actually doing in class. So we have to edit it. And we're just not sure like what we're doing."	Classroom setup
Frustration over lack of knowledge	Participant describes a time when they didn't know how to use a piece of equipment and the TA got frustrated that they didn't know	There's this thing called like a spectrometer, or something that when you put a vial in it, it shows the dilution of things, and I had no idea how to use it at all, and I don't remember them ever talking about how to use it or showing us how to use it. And like, I'm very attentive in class. So I feel like I	TA communication

		would have remembered that. But like he was just confused on why, I didn't know how to do it, and we are both a little bit frustrated.	
Not knowing reasons behind work	Participant says it feels like they got “thrown into the lab” and they don't feel like they understand why they are doing what they are doing	I just like got thrown into this. And I don't really know what I'm doing, and I don't like that. I don't know the reasons behind the lab like, I feel like we're just aimlessly like mixing things and knowing dilutions of things. And I don't know why? We're doing it which frustrates me as well	TA communication
talking in front of class causes student to feel lost	Participant says that when the TA talks in front of the class they have a hard time focusing but find it helpful when the TA comes up to explain things one on one	when they do stuff like on the board in front of us like sometimes I kinda drift off. But when he's like, right at our table showing us the physical motions we're going through, then I'm paying more attention.	TA communication
lab reminds student of high school +	Participant says that they miss high school where teachers knew them and they knew everyone in the class and they say this class reminds them of that	He knows my name, which just makes it feel more homey cause, like I've been missing a lot of the high school feel where all my teachers knew me, and like I knew everyone in the class.	College transition
early morning class is quiet	Participant says that the class is less engaged because it's an 8am	I think we're a lot more quiet than we would be if it were later class definitely.	Classroom setup
majority of the class is nursing students	Participant says the class is mostly nursing students who live together in nursing LLC	“We have to do group activities. We had to do a group presentation in the last lab, and everyone in my group is people I know and live with. So it's definitely easier to work together.”	Classroom environment
outdoor activities	Participant says they feel most engaged when doing work outside, as they get to move around	we're like moving around and doing stuff rather than just sitting	Classroom strategies
discussed goals for the future with teacher	Memorable experience for student was reaching out to a teacher to discuss future plans and goals	when I scheduled a meeting with one of my teachers, and I guess this is outside the class. But I schedule a meeting and we discussed in a pretty good for a pretty good length of time. My	Support



		future as a student here, and what I wanna do with my life and my goals for the future and I'd probably say that's a the best experience I've had with my academic career here at UMaine	
struggling in the beginning	Participant says they struggled in the beginning of college	So far, I was struggling in the beginning but like, I said. I reached out to the instructor, and we met and we discussed what went wrong and how I can fix it for the future	College transition
TA cares about the class	TA makes sure students do well	if I ever need any help to like, don't hesitate to reach out and contact her again. too ask for it she definitely cares about the class, and making sure we do well in it.	Support
TA comes to class prepared		And she comes to class prepared every single time.	TA authority
encouraged to share opinions	Participant feels the class is a safe environment where everyone is encouraged to state their opinions and thoughts	The environment is a definitely healthy, safe environment. I feel very welcomed there, and feel like everybody gets their own chance to speak if they need to or want to, and everybody's encouraged to state their opinions and their thoughts and ideas about any of the topics that we're discussing	Classroom environment
Lots of interaction with TA	Participants says they interact with the TA a lot and allows them to be more successful in the class	Today in class, I was struggling with an outline on my topic and she came and helped me, one on one figure out a new topic for my speech, and gave me a little bit of extra support when I needed in order to get it figured out.	Classroom environment
starts every class with a random question	TA asks the class a random question everyday at the start of class as a way to take attendance.	every time at the start of class. She hands out this postcard, and she asks us to write our name, and then there'll be like a prompt on the card. for example, today was, she asked, what food could we have for the rest of our life if we could only have one food. then she opens it up for discussion, and we all can talk to each other and discuss if we want to or not. and it's just a	Classroom strategies

		good way to start the class and really get back into the rhythm. I guess, it's a good ice breaker	
Atmosphere of safe learning	Participant says the icebreaker activity in the beginning of class creates an atmosphere of safe learning	when she hands out those cards and opens up the discussion to the class and includes us and helps us out I guess. Yeah, that's the once you really, those postcards are a big thing that really, I guess creates a atmosphere of a safe atmosphere of learning I guess	Class environment
Extra support when needed	If students are struggling in class the TA will help them on on one	“Today in class, I was struggling with an outline on my topic and she came and helped me, one on one to figure out a new topic for my speech, and gave me a little bit of extra support when I needed it, in order to get it figured out.”	Support
TA styles of teaching has affected student	Participant has experienced a different learning style in this classroom and said that is has allowed him to understand the importance of reading out for help	my learning experience in this class is different than the others, and it her style of teaching is definitely affected me in various ways.I feel like if there's ever something I'm not understanding that well, I could. I feel like she makes it very easy to talk to talk to her about it and to contact her.	TA communication
explains things in different ways	When student is confused the TA will explain it in a different way to help the student understand	if any, if we need help on anything and as well as in class,the same thing goes like she can explain something in a different way possibly in order for us to understand it better and me especially too	TA communication
connecting with a teacher during class about hobbies	Memorable experience of talking with a teacher about each others hobbies	I was just doing just like the lab assignment for that day, and he, just like came sat down, and we were just talking about like all the hikes, he went on, and like all the stuff that he does and I was asking a bunch of questions like, why, he's a teacher and just stuff like that.	Support
required class	Some students try harder than others	“It’s not my favorite but I have to take it”	Institutional factor

stayed after class and talked one on one with students	Student got a lot of good feedback and help them on their speech	She had a class just end early, cause we got through everything that we needed, and so she said she was gonna stay behind and like finish up the class, and anybody could stay, and it was me and somebody that was sitting next to me are the only people that stayed. And so she just like sat next to us and was like asking us what we're doing like specifically where we're at in our project and our different presentations. And we asked her a bunch of questions, and she was right there to give us a bunch of feedback which helped	Support
TA seems more like you	Not having to call the TA "doctor" because they are still a student	you don't have to call her doctor or anything, because she's still a student, kinda just like you are. So that's what makes it so easy to go up and ask some questions	TA relatability
TA doesn't seem like an actual teacher	Seems like someone that is just supervising	She's not like the teacher, like she like explains, like what we're supposed to be doing and stuff. But she doesn't seem like an actual teacher. She just kind of seems like some one that like is supervising	TA authority
language barrier	Makes it more difficult to understand each other and can make learning trickier	I will say there is a little bit of a language barrier her English isn't like. I can understand her well enough, but it's very, very hard, and I know a lot of other people also have that opinion. And I think that's a big reason to why it's learning's like difficult in that class, and why she might come off as more like chill.	TA communication
difficult to adjust from high school to college	Brightspace transition was challenging	I think that using bright space was challenging. Because in my high school, like, we would always use like Google classroom, and then like going to like using bright space all the time for everything like test quiz, like, I think that was the biggest challenge	College transition

Hands on activities	Participant finds it easier to learn through hands on activities	“Right now, we're testing urine samples. So we test that for kidney diseases or Ph balance”	Classroom strategies
TA makes meeting with students a priority	TA cleared their schedule to help student and gave them extra credit options	when I asked for extra help, and she, like cleared her schedule for me, and, like. made it a point to come meet with me to see what I needed help on and like gave me extra credit options and helped me fix some assignments	Support
Hearing disability	Makes it harder to focus in class	but I'm hard of hearing so it's kind of difficult sometimes cause when I wear my hearing aids. And if I'm sitting next to people, even if they're like 3 rows behind me, and they're talking sometimes, like I can hear that, and it's kind of distracting	Self
Helpful about disability	Participant found it really easy to reach out to the TA about their accommodations. They said that it made them feel that they were not being judged	“And so she just asked for my accommodations, and we decided to go to the Professor together, and she helped me communicate with the Professor, because I had a little bit of a hard time explaining everything. speaking up for myself.”	Support
scan the entire room when talking	TA feels like the are talking to everyone and makes eye contact when communicating	they really seem to like look around like when when they're talking, or something they like really like, scan the entire room and like tend to make eye contact with like a lot of people I feel like for, like me, at least like not like super, like direct eye contact, but like it feels like they're actually talking to everyone.	TA communication
Easier to go to class	Having someone that is there to help makes it easier to go to class	It's been helpful. It's made me want to like, go to class, at least So that's good, I guess because it's really easy to like not go and just be on date with like, what's online, but like having someone that's like more there, I guess is like pretty helpful.	Support

## AUTHOR'S BIOGRAPHY

Hope Carroll will be graduating from the University of Maine in May 2024 with a BA in Communication and minors in Marketing and New Media. Hope was born and raised in Portland, Maine and will be moving to upstate New York after graduating. During Hope's time at UMaine she served as the Media Assistant for the Honors College, the Director of Communications for UMaine Student Government, Vice-President of the Figure Skating club, a radio DJ on WMEB and is a member of All Maine Women. Hope looks forward to pursuing a job in public relations after graduating as well as exploring the Adirondacks and everything New York has to offer.