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by

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2018

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**Undergraduate Engagement in Permitted and Unpermitted  
Collaboration on Homework**

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**Undergraduate Engagement in Permitted and Unpermitted  
Collaboration on Homework**

**by**

**Lori Reubush McNabb**

**Dissertation**

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

**Doctor of Philosophy**

**The University of Texas at Austin**

**May 2018**

## **Dedication**

This dissertation is dedicated to the memory of the first over-educated women who inspired me, my Mother and my Aunt, Judith Flora Reubush and Fay Jaynes Reubush. While neither is with us now, they were with me in spirit throughout my graduate studies.

## **Acknowledgements**

Despite spending close to two decades helping college students persist and graduate, I was sometimes unsure if I could do it myself, when it came to completing a dissertation and a doctoral degree. But each time I struggled I had the support of a community around me. I could not have reached this goal without these mentors, friends, colleagues, and family members.

I am grateful for the advice and insight of my advisor and committee chair Dr. Patricia Somers. My committee members, Dr. Juan Gonzalez, Dr. Richard Reddick, Dr. Paul Resta, and Dr. Edwin Sharpe, each also played a vital role in helping me to complete and make sense of this research. You are amazing! In addition, thank you to the always-helpful staff members in the College of Education, in particular Hortensia Palomares, Linda Overton, and Dr. Martha Ovando. And, finally, thank you to all my classmates who walked this path with me.

There are too many friends who encouraged me along the way to list them all. But I would be remiss not to thank Dr. Darcy Hardy and Dr. Rob Robinson. Our philosophical conversations and their friendly nagging were invaluable. In addition, I have been fortunate to have managers and colleagues who supported me in this effort, at The University of Texas System TeleCampus, The University of Texas at Austin's Institute for Public School Initiatives, The University of Texas at Austin's Department of Computer Science, and now Civitas Learning.

Finally, I cannot even begin say "thank you" enough to my friend, partner, and husband, Francis "Mac" McNabb. He always encouraged me. In addition, my daughters Flora and Pearl, and their belief in me, always pushed me forward. You are both role

models to me! Also, thank you to my sisters Leigh and Suzanne for cheering me on. I know my brother Charlie would have done the same if he were still with us. And, finally, thank you to my father Harry Reubush and his wife Libbie for their support. My parents, Harry and Judy Reubush, always taught me that I can accomplish anything. When it came to this life goal, and with the support of mentors, friends, colleagues, and family members, they were correct.

Thank you (thank you, thank you) all of you! I am forever grateful for having each and every one of you in my life.

## **Abstract**

### **Undergraduate Engagement in Permitted and Unpermitted Collaboration on Homework**

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The University of Texas at Austin, 2018

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Academic dishonesty has existed as long as higher education, and there is an extensive record of research on it. Through that, we know that the most significant increase in cheating since the mid-1960s has been in undergraduate students' participation in unpermitted collaboration on homework, the most common method of academic dishonesty, form of academic dishonesty for students to believe is trivial or not cheating, and type of academic dishonesty for students and faculty members to disagree about its severity. This increase mirrors the growing use of collaborative learning techniques in K-16 schools. The purpose of this research was to investigate this collision of higher education's traditional ways of addressing academic dishonesty with students' widespread use of collaborative learning techniques. The research questions were: 1) How do undergraduates describe their experiences with collaboration with classmates on homework assignments? 2) How do undergraduates describe their experiences with unpermitted collaboration with classmates on homework assignments? and 3) How do

undergraduates describe the situations that influence their engagement in unpermitted collaboration on homework assignments? The goals were accomplished through a phenomenological approach, or learning about students' participation in collaborative learning on homework assignments as well as the contexts within which it can become cheating. The researcher gathered students' stories of permitted and unpermitted collaboration on homework which could be described by social interdependence theory, or the construct on which collaborative learning techniques are built. Several frameworks that describe the students' behaviors were identified, and the stories of permitted and unpermitted collaboration were compared through the lens of moral development and goal orientation theories. The researcher found that students engage in unpermitted collaboration for learning. In addition, students make purposeful decisions about cheating, and it can be due to a desire to learn. Also, students' collaborative teams can be complex. In addition, students believe that faculty members want them to learn and faculty members are an important source of information for students. The researcher found that neither moral development theory nor goal orientation theory explain students' participation in unpermitted collaboration on homework. Based on these findings, recommendations for practice and research are provided.



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## **Chapter 1: Introduction**

University students' engagement in academic dishonesty has been remarkably consistent. Multiple studies, completed over more than fifty years, have shown that about 70% of undergraduates cheat on academic work (Bowers, 1964; McCabe, Butterfield, & Treviño, 2012; McCabe & Treviño, 1993; Whitley, 1998). Nevertheless, today's students cheat in ways that differ from their 1960s counterparts; they are more likely to get answers to a test from someone who's already taken it, equally likely to plagiarize (but more likely to use the Internet than printed materials), and less likely to turn in a paper written entirely by another person (McCabe et al., 2012). The most significant increase in cheating has been in undergraduates' participation in unpermitted collaboration on homework assignments (Ariely et al., 2012; Bell, 2007; Committee on Intellectual Integrity, 2007; Faculty Senate Ad-Hoc Committee on Academic Integrity, 2012; McCabe, 2005a; McCabe et al., 2012; Office of Academic Integrity, 2009; UMBC Office of Institutional Research, 2012). This increase mirrors the widespread adoption of collaborative learning techniques in K-16 classrooms, which has been shown to increase learning (D. Johnson & Johnson, 2009; D. Johnson, Johnson, & Smith, 2007; Smith & MacGregor, 1992). This paper describes a qualitative research project that explored students' experiences with this phenomenon.

### **STATEMENT OF THE PROBLEM**

Collaborative learning is a specific form of working together—the application of social interdependence theory to educational environments—that leads to increased educational outcomes (D. Johnson & Johnson, 2009; D. Johnson et al., 2007; Smith &

MacGregor, 1992). Its widespread implementation in K-12 and higher education has changed the way educators teach and students learn (D. Johnson et al., 2007; Smith & MacGregor, 1992). Almost all students entering American colleges today have been educated using collaborative learning techniques (D. Johnson et al., 2007).

Increases in collaborative learning are believed to be the source of an increase in collaborative cheating, in particular unpermitted collaboration on out-of-class assignments (Cole & McCabe, 1996; McCabe et al., 2012). Unpermitted collaboration on out-of-class assignments is the most common: 1) method of academic dishonesty, 2) form of academic dishonesty for students to believe is trivial or not cheating, and 3) type of academic dishonesty for students and faculty members to disagree about its severity – or even whether it is cheating (Ariely et al., 2012; Bell, 2007; Committee on Intellectual Integrity, 2007; Faculty Senate Ad-Hoc Committee on Academic Integrity, 2012; McCabe, 2005a; McCabe et al., 2012; Office of Academic Integrity, 2009; UMBC Office of Institutional Research, 2012).

Academic cheating has always been a part of higher education, and most students do it (Bowers, 1964; McCabe et al., 2012; Whitley, 1998). Members of the academy have traditionally viewed academic dishonesty through the lens of moral development theory (Bertram Gallant, 2008; Blum, 2009; Nuss, 1988; Whitley, 1998). Those who do so assume that cheaters lack moral development and cheat due to poor ethical reasoning skills (McCabe et al., 2012; Nuss, 1988). This leads to academic integrity programming aimed at encouraging students' moral development (Crown & Spiller, 1998; Gismondi, 2006; Nuss, 1988).



More recently, goal orientation theory has been used to explain academic dishonesty, and it is now also often frames academic integrity research and programming (Eric M. Anderman & Tamera Burton Murdock, 2007; Blum, 2009; Lang, 2013c). Those that view their study and work through this lens assume that cheaters are focused on earning a high grade (called a “performance orientation”) rather than learning (or a “mastery orientation”), which leads to academic integrity programming designed to create environments in which students want to learn (Eric M. Anderman & Tamera Burton Murdock, 2007; Lang, 2013c).

There is a lively debate between these two camps (moral development and goal orientation theorists) regarding the cause of academic dishonesty (McCabe et al., 2012; Murdock & Anderman, 2006). Nevertheless, they agree on at least one aspect of academic dishonesty: both assume that cheaters do not intend to learn (Eric M. Anderman & Tamera Burton Murdock, 2007; Lang, 2013c; McCabe et al., 2012; Whitley & Keith-Spiegel, 2002). In contrast, students have reported they work together on homework assignments even when it is forbidden, due to the value of collaborative learning (Ariely et al., 2012; Pickus & Shanahan, 2012, para. 3).

A study at Duke University found that unpermitted collaboration on homework had increased 15% in five years (Ariely et al., 2012). Members of the faculty committee that oversaw the study wrote that the findings raised important questions regarding student collaboration (Ariely et al., 2012). The committee, chaired by behavioral economist Ariely (author of *The Honest Truth about Dishonesty*) and including Kenan

Institute for Ethics faculty members Pickus and Shanahan, raised questions we cannot currently answer:

Is this because of an increased use of team and group work in courses? How are expectations for group work communicated by faculty across the disciplines? Are students receiving mixed messages? Do students knowingly choose to collaborate when they know they should not? Most important, what should be the rules of the road for maintaining individual integrity in collaborative efforts? (Ariely et al., 2012, p. 2)

In *Academic Integrity in the Twenty-First Century: A Teaching and Learning Imperative*, Bertram Gallant (2008), an administrator at the University of California at San Diego, wrote that “a lack of familiarity with how to assess student learning and individual achievement when students have worked with others” causes faculty members to treat collaboration as cheating (p. 90). The concern is that a focus on catching cheaters may undermine learning:

This risk may be particularly acute in the case of collaboration because institutions have not necessarily been successful at both encouraging and disciplining collaboration in the spirit of enhancing learning (Drinan, 1999). Unfortunately, the potential of loss is great because research has shown that students learn more when they are thinking, applying, collaborating, and problem solving. (Bertram Gallant, 2008, pp. 82-83)

This intersection, of new ways of learning and long-standing beliefs about academic dishonesty, was the focus of this study. It was an unexplored area in the literature: the experiences of students participating in permitted and unpermitted collaboration on homework assignments.

## **PURPOSE OF THE STUDY**

The purpose of this study was to understand undergraduates' participation in collaborative learning on homework assignments, as well as the contexts within which that participation, in some cases, becomes academic dishonesty. For the purpose of this research, "collaboration" was generally defined as students working toward a shared goal believing they will only be successful if the other students with which they are working are as well (R. Johnson & Johnson, 1994). "Unpermitted collaboration on homework" was generally defined as students working collaboratively, when it was forbidden, on out-of-class coursework assigned primarily for learning.

The research questions for the study were informed by a review of the literature on collaborative learning, permitted and unpermitted collaboration on out-of-class assignments, and academic dishonesty. The study examined the experiences of undergraduates participating in collaborative learning and cheating at a large public institution. My research questions were:

1. How do undergraduates describe their experiences with collaboration with classmates on homework assignments?
2. How do undergraduates describe their experiences with unpermitted collaboration with classmates on homework assignments?
3. How do undergraduates describe the situations that influence their engagement in unpermitted collaboration on homework assignments?

## **CONCEPTUAL FRAMEWORK**

The common attributes of cooperative and collaborative learning were the basis of the conceptual framework for the study. My focus was on questions surrounding students' cooperation and interdependence with and responsibility to one another, and

included an effort to describe student-led groups and the assignments on which they collaborate (Davidson, 2002).

## **OVERVIEW OF METHODOLOGY**

Qualitative research methods were used to develop a “complex, detailed understanding of the issue” (Creswell, 2007, p. 40). Interpretivism guided the study; it’s adherents conceptualize reality as being personal and contextual (Willis, 2007).

Phenomenology, an interpretivist approach to qualitative research, was used.

Phenomenology allows a researcher to “understand several individuals’ common or shared experiences of a phenomenon” (Creswell, 2007, p. 60). Its goal is to describe the “essence” of an experience, free from the “reconstructed logic” of the theories we use to explain our lives (van Manen, 1990, p. 45). As van Manen explains:

Phenomenological method is driven by a pathos: being swept up in a spell of wonder about phenomena as they appear, show, present, or give themselves to us. In the encounter with things and events of the world, phenomenology directs its gaze toward the regions where meanings and understandings originate, well up, and percolate through the porous membranes of past sedimentations—then infuse, permeate, infect, touch, stir us, and exercise a formative and affect effect on being” (2014, pp. 26-27).

The research design was adapted from the phenomenological model described by Seidman in *Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences* (2013). The study was conducted at a large, four-year, “more selective” institution, classified as a Carnegie Tier One institution (Center for Postsecondary Research, 2017). Purposeful sampling was used to identify participants who have experienced the phenomenon being studied and who broadly represent the research site (Seidman, 2013).

Data was gathered through a pre-interview questionnaire and semi-structured interviews. Two one-on-one interviews were held with 12 undergraduates, the first for context and the second to gather narratives of experiences with the phenomenon being studied (Seidman, 2013). Each interview was recorded and transcribed verbatim. Member-checking of the interview transcripts increased the trustworthiness of the resulting data (Seidman, 2013). Additionally, I created field notes to catalog my reflections on each participant and interview and to summarize the students' stories regarding the phenomenon I was studying.

I used in vivo, values, and pattern coding to make meaning of the interview transcripts, field notes, and other materials by framing them using the students' own words and beliefs, and then by identifying themes in the narratives (Saldaña, 2013). In addition, I wrote analytic memos to help me to find themes in the data (Maxwell, 2005; Saldaña, 2013; Seidman, 2013). I used Computer Assisted Qualitative Data Analysis Software (CAQDAS) to support data coding and analysis (Maxwell, 2005). In addition, I identified each unique story the students told me about their engagement in unpermitted collaboration on homework. I cataloged the components of each and described each in writing. I also used field notes and analytic memos provided two opportunities for me to reflect on the meaning of the results of the interviews (Maxwell, 2005; Seidman, 2013). This was all part of the "creation of the text," which van Manen explains, "is the object of the research process" (1990, p. 111).

## DEFINITIONS OF TERMS

The following terms and phrases are used in this paper and more definitions are offered throughout.

- *Academic dishonesty and cheating* are when students give or receive “unauthorized assistance in an academic exercise” or receive course credit for work that is not their own (Nuss, 1988, p. 1).
- *Academic integrity* is the lack of cheating or academic dishonesty.
- *Collaboration* is when individuals work together cooperatively to reach a goal or complete a task.
- *Collaborative learning* has five components: 1) a small group of individuals who 2) work cooperatively on 3) a common task that is appropriate for group work. The group members 4) accept responsibility for or are accountable to the group, and 5) believe that each member can only accomplish the task if everyone does (which is called “interdependence”) (Davidson, 2002).
- *Collaborative cheating* is when two or more students work together to engage in academic dishonesty. Unpermitted (or “unauthorized”) collaboration is one of many forms of collaborative cheating.
- *Homework assignments (or “homework” or “assignments”)* are academic tasks provided by a faculty member that are intended primarily for instruction, rather than for assessment, and are completed by students outside of the classroom and independent of the instructor (Cooper, Robinson, & Patall, 2006).
- *Unpermitted (or unauthorized) collaboration* is collaborative learning that has been forbidden by a faculty member or members, an academic or student services unit, or an institution. It is one of many forms of collaborative cheating.

## LIMITATIONS AND DELIMITATIONS

According to Roberts (2010), limitations are the aspects of a study that may negatively affect the outcome or the ability to generalize the results, they are inherent in

the study's design, and are not controlled by the researcher. Delimitations define a study's boundaries and are the purview of the researcher (Roberts, 2010).

This study was qualitative, which limits its generalizability to other institutions or students. Its aim was to describe the phenomenon. I was not designed to devise ways to influence or act upon phenomenon, although I do provide recommendations for both practice and research in Chapter 7. In addition, while the study's results sheds some light on the applicability of current theoretical constructs to students' engagement in unauthorized collaboration on homework, phenomenological research does not result in new theory (Moustakas, 1994). Also, while all participants had collaborated with others on out-of-class work, not all had engaged in unpermitted collaboration on homework.

This study was conducted at a large, highly selective institution during the spring, summer, and fall terms in 2015 and involved twelve undergraduates. The research investigated permitted and unpermitted collaboration on homework assignments. "Collaborative learning" was narrowly defined and the definition was based on research literature. The study focused on students' reports of and reflections on personal experiences with working collaboratively on completing low stakes, graded, academic tasks that were primarily intended to reinforce, rather than assess, learning. The study did not include students' involvement in other forms of cheating, such as working together in a classroom, group work assigned by an instructor, or cheating on take-home or in-class exams, although some participating students shared their experiences with these phenomena as well.

## **ASSUMPTIONS**

There were several assumptions underlying this research. First, although I have not found any research showing a direct correlation between the increased use of collaborative learning and unpermitted collaboration on homework assignments, I followed the lead of other researchers and assumed that the two are connected (Bertram Gallant, 2008; Cole & McCabe, 1996; McCabe et al., 2012). I also trusted that at least some of the students quoted in a Duke University report on a student survey, who said they participated in unpermitted collaboration on homework assignments for the purpose of learning were being truthful (Ariely et al., 2012; Pickus & Shanahan, 2012).

Finally, I assumed that students can learn collaboratively outside of the classroom without faculty members' instruction, support, or reward, even though some research on some forms of collaboration indicate otherwise; in a review of 20 years of literature on collaborative learning in virtual learning environments, Resta and Laferrière (2007) found "a consensus among researchers on the importance of the instructor's leadership" and that the faculty member's role in "grounding, monitoring, modeling, coaching, or contributing" to the discussion were critical to effective group functioning (p. 73). In addition, despite a thorough review of library, digital, and online materials, I did not find any research on students' experiences with learning collaboratively without guidance from an instructor. Regardless, the conceptual framework I chose for the study—seeking to understand students' engagement in collaborative learning techniques—required me to assume that students can and do participate in collaborative learning independent of their classroom and instructor.



## **SIGNIFICANCE OF THE STUDY**

Moral development and goal orientation theories are firmly entrenched in the research literature regarding academic dishonesty and the programming intended to address it, and previous researchers have established that unpermitted collaboration is increasing, students are questioning whether it is cheating, and faculty and students disagree about its severity (Anderman, Griesinger, & Westerfield, 1998; Eric M. Anderman & Tamera Burton Murdock, 2007; Ariely et al., 2012; Bell, 2007; Bertram Gallant, 2008; Bowers, 1964; Bushway & Nash, 1977; Faculty Senate Ad-Hoc Committee on Academic Integrity, 2012; Kibler, 1988; Lang, 2013c; McCabe et al., 2012; McCabe & Pavela, 2000; O'Rourke et al., 2010; Office of Academic Integrity, 2009; UMBC Office of Institutional Research, 2012; Whitley, 1998; Whitley & Keith-Spiegel, 2002; Wrightsman, 1959). Additionally, there was some evidence that the theories in use might not explain the phenomenon of unpermitted collaboration on homework assignments (Ariely et al., 2012; Bertram Gallant, 2008). Specifically, one of the shared tenets of the theories in use is the assumption that “cheaters never learn,” but some students have reported on campus surveys that learning was their intention when collaborating with others on out-of-class work when it was not allowed (Ariely et al., 2012; Bertram Gallant, 2008; McCabe, 2005a).

In her book aimed at promoting a teaching and learning approach to encouraging academic integrity, Gallant recommended future research to “study connections between academic misconduct and learning” (2008, p. 111). As she explained:

Academic integrity writers and researchers have been arguing for years that student academic misconduct is problematic because of its capacity to undermine learning. Evidence is lacking to support this statement, however. In fact, because the research also shows that students are more likely to engage in unauthorized collaboration or “cheat” on menial assignments, some evidence may suggest that students are more likely to break the rules when they do not see a negative effect on their learning. The need for such research has been advocated for a number of years (Houston, 1976). (2008, p. 111)

This gap in the literature was the focus of my study: the experiences of students taking part in the most common form of learning and also the most common form of cheating in today’s universities. This type of research was needed, as the increase in unpermitted collaboration on homework is significant and a concern on most college campuses.

## **SUMMARY**

This chapter briefly described the intersection of the ways in which academics think about academic integrity and the ways in which today’s students think about learning. It included a brief description of the study, described in this paper, that investigated students’ experiences at this intersection, specifically their engagement in collaborative learning and the situations through which that can become academic dishonesty. Its intent was to give insight into students’ perceptions of collaborative learning and cheating on out-of-class assignments. The next chapter situates the study through a review of the literature on collaborative learning in educational environments, unpermitted collaboration on homework assignments, and academic dishonesty in higher education. The theoretical contexts investigated in the literature review heavily influenced the design of my study, the survey questions and interview protocol, and my reporting of the results.

## **Chapter 2: Literature Review**

The earlier chapter briefly described the research study. The purpose of this chapter is to situate the study within the research literature. It begins with a look at collaborative learning and some of the theories used to develop and study it. It describes the available data on unpermitted collaboration on homework and some of what we know about academic dishonesty. The theories often used to explain academic dishonesty are reviewed and contradictions between key theories and students' statements about unpermitted collaboration on homework assignments are demonstrated.

### **COLLABORATIVE LEARNING**

The essence of collaborative learning can be described as students working together toward a common educational goal (Prince, 2004) but Resta and Lee (2010) provided a more detailed explanation of its goals, processes, and outcomes:

The collaborative approach to learning encourages learners to work together on tasks, promoting individual learning by engaging them in collective processes. It offers opportunities to learn using dialogue and discussion while exploring diverse ideas and experiences. Process-driven, participants work together to solve problems, accomplish tasks, and create intellectual results, often not easily accomplished by a single individual. It opens the door to diverse perspectives, deepening understanding, sharpening judgment, and extending knowledge (Cowie & Rudduck, 1988). Collaborative education can yield outcomes beyond academic achievement, increasing competence in working with others and enhancing leadership skills. It engages learners to think about why they are learning and for whom they are learning (Resta, Awalt, & Menchaca, 2001). (p. 46)

The use of collaborative learning in educational environments, as we know it today, began in the mid-1960s when educational psychologists (and brothers) Johnson and Johnson developed curriculum for a teacher training program based on positive social interdependence theory (D. Johnson & Johnson, 2009). More than forty years later they

reflected on its broad adoption in educational environments, describing it as “one of the most successful and widespread applications of social and educational psychology to practice” (p. 365). Writing with Smith, they said collaborative learning affirmed the “educational value of student involvement, cooperation and teamwork, and civic responsibility,” and provided “an instructional procedure that affects the head and hand while simultaneously affecting the heart” (D. Johnson et al., 2007, pp. 16-17). As they explained it:

Cooperation, compared to competitive and individualistic efforts, tends to result in higher achievement, greater long-term retention of what is learned, more frequent use of higher-level reasoning (critical thinking) and meta-cognitive thought, more accurate and creative problem-solving, more willingness to take on difficult tasks and persist (despite difficulties) in working toward goal accomplishment, more intrinsic motivation, transfer of learning from one situation to another, and greater time on task. (p. 19).

They called this form of learning a “joint intellectual effort,” in which students are “mutually searching for understanding, solutions, or meanings, or creating a product” (p. 17). Its proponents describe it as generating learning that is active, constructivist, contextual, and “inherently social” (Smith & MacGregor, 1992, p. 11).

Collaborative learning has been studied extensively and found to be effective (D. Johnson, Johnson, & Smith, 1998; D. Johnson et al., 2007). Its benefits are academic, social, and psychological (Panitz, n.d.). For example, Prince (2004) reviewed three meta-studies that, together, reflected research published between 1924 and 1999, and found that collaborative learning improved students’ interactions with classmates aimed at learning, attitudes about learning, retention in academic programs, and self-perception of social support, along with academic achievement and self-esteem.

Over time, Johnson, Johnson, and their colleagues' work came to be called "cooperative learning," and "collaborative learning" is now used to describe less structured but more interactive group work (Davidson, 2002; Lai, 2011; Resta & Laferrière, 2007). Specifically, as Lai (2011) explains it:

Collaboration is sometimes distinguished from cooperative learning in that cooperation is typically accomplished through the division of labor, with each person responsible for some portion of the problem solving. Collaboration, on the other hand, involves participants working together on the same task. (p. 6)

This newer definition of "collaboration" (versus "cooperation") was used for this study.

Davidson (2002) compared six major approaches to cooperative and collaborative learning—student team learning, learning together, group investigation, the structural approach, complex instruction, and the collaborative approach—and identified five common attributes that describe collaborative behaviors:

1. "Common task or learning activity suitable for group work,"
2. "Small group learning,"
3. "Cooperative behavior,"
4. "Individual accountability and responsibility," and
5. "Positive interdependence" (Davidson, 2002, p. 182).

(Davidson also named nine attributes that varied across methods: grouping procedure, group structure and leadership, structuring of positive interdependence, explicit teaching of interpersonal skills, reflection on group work, climate setting, attention to students' status, group leadership, and the instructor's role.)

Of the six techniques considered by Davidson (Davidson, 2002), the Collaborative Approach best describes the type of student work investigated by this study: “Its intention is to focus on the creation of personal meaning and internally persuasive understanding through dialogue and discussion” (p. 191). Davidson (2002) provided the following examples for the Collaborative Approach for the five common attributes shared by the approaches he studies.

1. “The common task or learning activity is clarified so group members know the purpose of the group discussion, and its desired outcomes are clear to them (p. 191).”
2. There are often small groups within the larger collaborative group.
3. Discussion is the primary collaborative technique used. “Cooperative behavior involves a lot of discussion in which everyone takes part in clarifying the task, listening, disagreeing, and honestly stating ideas” (p. 191).”
4. Students are responsible for themselves and their own work. Students’ receive group and individual feedback. Clear and precise communications are expected of students.
5. “Interdependence is present in collaborative learning more as an underlying assumption than a technique. The assumption is that learning which takes place in daily life is predominantly social, with language as a primary means of communication. Thus social and collaborative interaction are fundamental in human learning and the classroom is a place where language should flow readily and freely among the learners” (pp. 191-192)

There are also behaviors specific to the collaborative approach. These include shared group leadership, group and individual reflection on the group processes, and a lack of attention to student status (Davidson, 2002). A key function of collaborative learning is knowledge building, which comes from students’ participation in “idea improvement” working toward “intentional goals” (Resta & Laferrière, 2007, p. 74). Through this joint

process, students collectively create and accept new knowledge (Stahl, 2006). Therefore “‘collaborative learning’ does not just mean that individual learning is enhanced by participation in small groups; it means that it is the groups themselves that learn” (Stahl, 2006, p. 220).

**Social interdependence theory.** In the early 1900s, Koffka, one of the founders of Gestalt Psychology, proposed that “groups were dynamic wholes in which interdependence among members could vary” (R. Johnson & Johnson, 1994). Lewin, one of his colleagues, expanded upon this idea by proposing that a group’s interdependence defined its essence (D. Johnson et al., 1998, 2007, p. 16). This interdependence is such that “a change in the state of any member or subgroup changes the state of all other members or subgroups” (D. Johnson et al., 1998, 2007). With Deutsch, Lewin developed social interdependence theory (D. Johnson et al., 1998), and Deutsch’s student David Johnson, along with others, applied it to the classroom (Smith & MacGregor, 1992).

Social interdependence exists when the accomplishment of each person within a group is affected by the actions of the others in the group (D. Johnson et al., 1998). Social interdependence can be positive, negative, or neutral (Smith & MacGregor, 1992). Positive interdependence is when a person believes they can only reach their goals if the other individuals with whom they are working also reach theirs (D. Johnson et al., 2007). “For one person to succeed in accomplishing his or her goals, other members of the group must be successful too: this is a condition of positive interdependence” (O'Donnell & Hmelo-Silver, 2013, p. 3). It has two key requirements. First, “each group member’s

efforts are required and indispensable for group success” (R. Johnson & Johnson, 1994, para. 12). Second, group members’ contributions are unique due to personal resources, skills, and assigned or unassigned tasks or roles (para. 12).

Group members’ goals and motivations are influenced by these group experiences and self-interest becomes shared interest (D. Johnson et al., 2007, p. 16). “Demonstrating the transition from self-interest to mutual interest is perhaps one of the most important aspects of social interdependence theory” (R. Johnson & Johnson, 1994, para. 13). As Johnson, Johnson, and Smith (2007) explain it:

Positive interdependence includes substitutability (i.e. the degree to which actions of one person substitute for the actions of another person), inducibility (i.e. openness to being influenced and to influencing others), and positive cathexis (i.e. investment of positive psychological energy in objects outside of oneself). (p. 17)

Finally, two approaches have been taken to creating the necessary interdependence for a successful group: “The social motivational perspective and the social cohesion perspective” (O'Donnell & Hmelo-Silver, 2013, p. 3) “A social-motivational approach to creating interdependence relies on the use of rewards or recognition for group productivity,” (p. 3) while a social cohesion approach relies on students’ motivation “to help one another succeed because they care about one another” (p. 4).

### **COLLABORATION ON HOMEWORK ASSIGNMENTS**

“Homework” can be any task students are expected to complete outside of the classroom, and can be intended for instruction or have a non-instructional goal (Cooper et al., 2006). “The most common instructional purpose of homework is to provide the student with an opportunity to practice or review material that has already been presented



in class” (p. 1). It can also be used to introduce a topic in preparation for class, transfer previously-obtained skills to new situations, and integrate topics that were learned separately from one another (Cooper et al., 2006). Despite a thorough review of the literature, I could not find any published research on collaboration on homework or on students working together on homework. On the other hand, there is a growing body of literature on unpermitted collaboration on homework.

**Unpermitted collaboration on homework.** The modern research record on cheating begins in the early 1960s. Bowers surveyed almost 5,400 male students at 99 colleges, creating the “first large-scale estimate of cheating rates in America’s colleges and universities” (Lang, 2013b). Bowers’ (1964) found the most likely forms of academic cheating were 1) failing to footnote copied material, 2) getting test questions or answers from someone who’d taken a test, and 3) copying answers from a book or other printed source. He asked students about working together on homework when it was not allowed and 12% reported they had done it (Bowers, 1964). As can be seen in Table 2.1, when they recreated Bowers’ study 30 years later, McCabe and Treviño found that almost half of students reported participating in this form of academic dishonesty in the newer study, an increase of 37 percentage points (McCabe et al., 2012).

Table 2.1: Types and Prevalence of Cheating at Nine Universities without Honor Codes in 1962-1963 and 1993-94 and Compared, in Order of Increase in Students' Self-Reported Engagement Over Time

<b>Cheating Behavior</b>	<b>1962-1963</b>	<b>1993-1994</b>	<b>Change</b>
Working on the same homework with several students when the teacher does not allow it	12%	49%	+37
Copying from another student on a test or exam	27%	52%	+25
Giving answers to other students during an exam	25%	37%	+18
Used crib notes during an exam	17%	27%	+10
Copying a few sentences of material without foot-noting in a paper	53%	54%	+1
Padding" a few items on a bibliography	35%	29%	-6
Turned in papers done entirely or in part by other students	21%	14%	-7
Plagiarized from public material on papers	35%	26%	-9
Getting questions or answers from someone who has already taken the same exam	46%	29%	-17
Any of the above behaviors	83%	87%	+4

Notes. There were 1,744 respondents in 1993-1994 and 2,312 in 1962-1963 survey. Adapted from "Cheating in College: Why Students Do It and What Educators Can Do About It," by D. L. McCabe, K. D. Butterfield, and L. K. Treviño, 2012, p. 48. Copyright 2012 by John Hopkins University Press.

Also, as can be seen in Table 2.2, the significant increase in students' participation in unpermitted collaboration on out of class assignments has made it the most likely form of cheating for undergraduate students at the schools that participated in a much larger and more recent study by McCabe, Butterfield, and Treviño's. They reported more than 40% of 70,000 students surveyed between 2002 and 2010 at said they'd worked with others on homework when it was not allowed (2012). Another study, conducted at Duke University, showed similar results. There, surveys conducted in 2005

and 2011 found a 15% increase in students' reporting they had worked together on homework knowing they were cheating (Ariely et al., 2012). Of the five forms of academic dishonesty investigated at Duke, both surveys indicated students were most likely to have worked together on out-of-class assignments when they knew that they should not (Ariely et al., 2012).

Table 2.2: Types of Cheating at Universities without Honor Codes between 2002 and 2010, in Order of Likelihood

<b>Cheating Behavior</b>	<b>Students Reporting 2002-2010</b>
Working on the same homework with several students when the teacher does not allow it	42%
Copying a few sentences of material without footnoting in a paper	36%
Getting questions or answers from someone who has already taken the same exam	30%
Copying from another student on a test or exam	14%
Padding" a few items on a bibliography	13%
Giving answers to other students during an exam	11%
Used crib notes during an exam	8%
Plagiarized from public material on papers	6%
Turned in papers done entirely or in part by other students	6%
Any of the above behaviors	83%

Notes. There were about 73,000 participants and about 58,000 responded to all nine items. Although Tables 2.1 and 2.2 indicate that cheating has decreased, the authors attribute the change to a shift from paper to computerized surveys and students' concerns about the online format. Comparisons of paper studies in 1993-1994 and by computer studies 2002-2010 indicate a decrease in all but students working together on homework when it was not allowed. Adapted from "Cheating in College: Why Students Do It and What Educators Can Do About It," by D. L. McCabe, K. D. Butterfield, and L. K. Treviño, 2012, p. 58. Copyright 2012 by John Hopkins University Press.

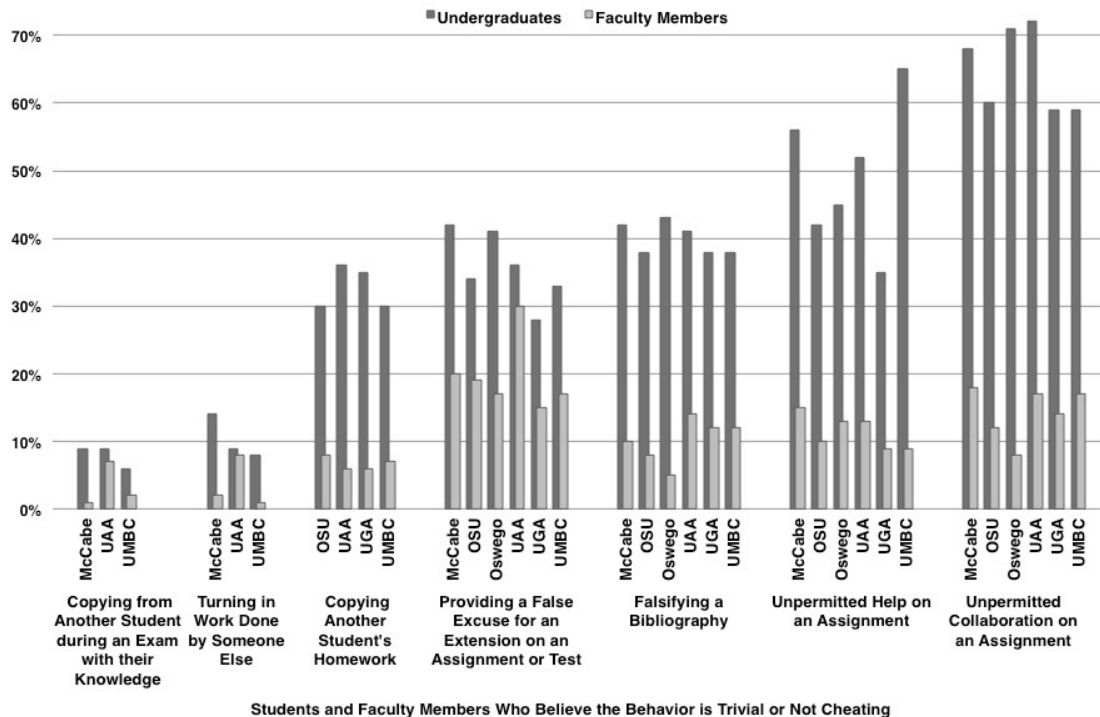
Not only are students more likely to take part in collaborative cheating than they were in the past, they are also more likely to believe it is acceptable to do so. Again, in the 1960s, 12% of students admitted to working together on homework when it was forbidden (Bowers, 1964). Thirty years later, 61% of students called collaborative cheating “trivial” and 23% did not think it was cheating at all (McCabe et al., 2012, p. 49). Moreover, students and faculty members often disagree about the severity of, and even whether, students are cheating when they work together on homework when it is not allowed. Duke’s Pickus and Shanahan explained that “most undergraduates simply don’t see working with others as a serious offense,” and that, “in contrast, teachers mostly regard unauthorized collaboration—from sharing notes to borrowing ideas—as a violation of the one norm most faculty still agree on: academic integrity” (para. 2).

Nationally-normed surveys available through the Center for Academic Integrity ask students and faculty members to rank specific behaviors as serious, moderate, or trivial cheating, or not cheating at all (McCabe, 2005a). Figure 2.1 shows the percentage of student and faculty members’ who said collaborative homework cheating was trivial or not cheating on multiple campus surveys completed between 2002 and 2011. As can be seen, at least 55% of students surveyed indicated collaborative cheating on homework was trivial or not cheating, while fewer than 20% of faculty members agreed (Bell, 2007; Committee on Intellectual Integrity, 2007; Faculty Senate Ad-Hoc Committee on Academic Integrity, 2012; McCabe, 2005a; Office of Academic Integrity, 2009; UMBC Office of Institutional Research, 2012). Similarly, in their 2002 book, Whitley and Keith-Spiegel (2002) outlined five “norms” which “appear to lead a substantial number of

students not to view a behavior as dishonest,” and one was students’ belief that unpermitted collaboration was okay (p. 18). McCabe, Butterfield, and Treviño reflected on this phenomenon in their 2012 book:

Our research has shown an increase in collaborative cheating. In many college courses students are assigned to teams and are encouraged to collaborate on team projects. However, students often receive mixed messages about the acceptability of collaboration. In some cases, instructors do not explicitly and unambiguously communicate standards of acceptable and unacceptable behavior. Another problem occurs when instructors teach students about the importance of collaboration and teamwork ... but then forbid students to collaborate on course work. Given these mixed messages, it is not surprising that some students conclude that collaboration is acceptable, even when the instructor asks for individual work. (pp. 38-39)

Figure 2.1: Graphs comparing the results of studies between 2002 and 2011 that explored undergraduate students' and faculty members' beliefs about the seriousness of various forms of cheating



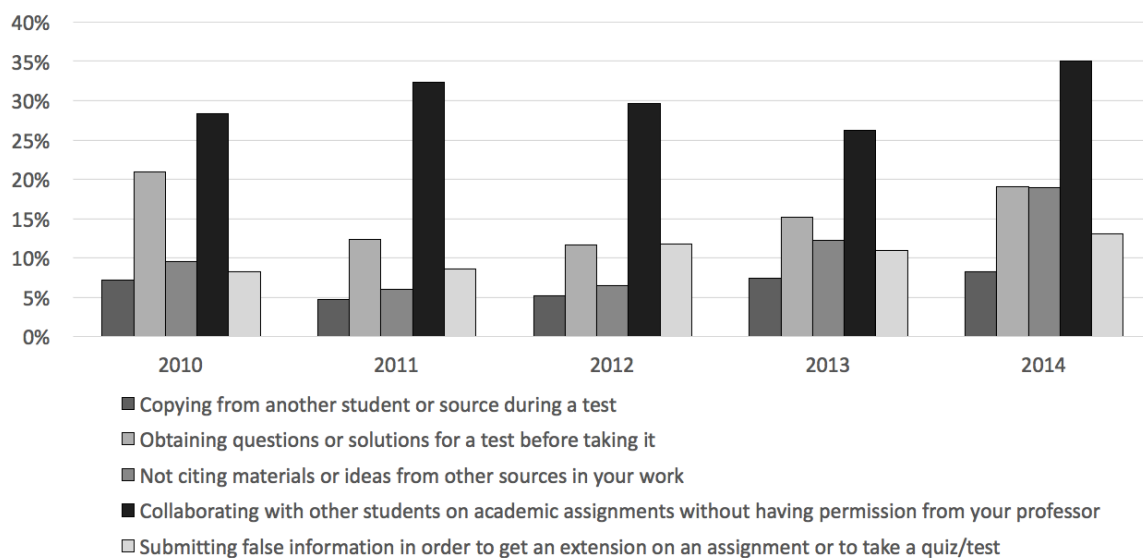
Adapted from “University of Georgia Academic Honesty Survey” by D. Bell, 2007. Copyright 2007 by the University of Georgia; “Academic Integrity Survey 2006-2007: Summary of Results” by the Committee on Intellectual Integrity, 2007, Copyright 2007 by the State University of New York at Oswego; “Survey Summary Report” by the Faculty Senate Ad-Hoc Committee on Academic Integrity, 2011, Copyright 2011 by the University of Alaska Anchorage; “Cheating Among College and University Students: A North American Perspective” by D. L. McCabe, 2005, International Journal for Educational Integrity, 1(1), Copyright 2005 by D. L. McCabe; and, “UMBC 2011 Academic Integrity Survey” by the UMBC Office of Institutional Research, 2012, Copyright 2012 by the University of Maryland, Baltimore County.

Texas Tech University published five years of reports on their annual academic integrity survey. These allow us to see how some aspects of this phenomenon are illustrated at a single institution. All five reports include information on students' responses to the statement: “It is okay to collaborate with other students on academic

assignments without having permission from your professor” (The Texas Tech University Ethics Center, 2010, p. 2, 2011, p. 11, 2012, p. 7). For three years beginning in 2010, the students were asked to indicate if this and 11 other statements was “true” or “false” (2010, 2011, 2012). According to the institution’s reports, the statement on unpermitted collaboration on homework was the one the students answered “incorrectly” (2010, 2011, 2012). In other words, the institution’s goal was for the students to indicate the statement was “false” but, instead, in each of the three years, about one-third of the students answered “true,” or 28.4% in 2010, 32.3% in 2011, and 29.6% in 2012 (2010, p. 16, 2011, p. 8, 2012, p. 8). In comparison, the second most likely statement for the students to answer “incorrectly” was answered that way by 20.9% of the students in 2010, 12.4% in 2011, and 11.8% in 2012 (2010, p. 16, 2011, p. 8, 2012, p. 8). The institution updated the survey for 2013 and 2014 and the new one included the same statement about working together without permission, but students were asked to indicate if the behavior described was “Not at all bad,” “Somewhat bad,” “Bad,” or “Very Bad” (The Texas Tech University Ethics Center, 2013, 2014). In 2013, 6.9% of respondents indicated working together without permission was “Not at all bad,” and 19.3% called it “Somewhat bad”—totalling 26.2% of respondents (2013, p. 8, 2014, p. 8). In 2014, 10.3% called it “Not at all bad,” and 24.7% called it “Somewhat bad,” totalling 35% (2013, p. 8, 2014, p. 8). In comparison, only about 15% of students said the same about the second most likely behavior for the students to call “not at all” or “somewhat” bad in 2013, and about 19% said the same in 2014 (2013, p. 8, 2014, p. 8). To summarize, and as can be seen in Figure 2.2, over the five year period reflected in the five reports, 25%-35% of students

indicated it was acceptable (“true”), “not at all bad,” or “somewhat bad” to collaborate with other students without faculty approval (2010, p. 16, 2011, p. 8, 2012, p. 8, 2013, p. 8, 2014, p. 8). During this same time period, 12%-21% of students, at most, said the same about other forms of cheating (2010, p. 16, 2011, p. 8, 2012, p. 8, 2013, p. 8, 2014, p. 8).

Figure 2.2: Graphs showing the percentages of Texas Tech University students who said each statement was “true,” or that it described behavior that was “not at all bad” or “somewhat bad,” on surveys conducted between 2010 and 2014



Adapted from “Texas Tech University Arbor Day Academic Integrity Survey” by The Texas Tech University Ethics Center, 2010, 2011, 2012, 2013, and 2014, Copyright 2010, 2011, 2012, 2013, and 2014 by Texas Tech University.

## CHEATING IN HIGHER EDUCATION

Looking at cheating more broadly, we find that students’ self-reported participation in academic dishonesty has been consistent for more than 50 years (McCabe et al., 2012). Studies from the early 1960s to the present day show that, although student involvement in academic dishonesty had been consistent over time, the ways in which students cheat has differed through the years. For example, cut-and-paste Internet



plagiarism has increased and cheating on written work, some types of test cheating, and serious plagiarism has decreased (McCabe et al., 2012). Changes in the types of cheating within which students take part are ongoing, and reflect societal changes. For example, in the 1970s, when university budgets were limited and competition for admission and scholarships increased, competitive cheating (such as ripping pages from university library books to gain an advantage over classmates) became the norm (Bertram Gallant, 2008, p. 25). Then, as access to higher education eased, cooperative cheating (for example, students sharing old papers and tests) increased (p. 25). (The phrase “unauthorized collaboration” was coined in 1976 by a *Los Angeles Times* reporter to describe this type of cooperative cheating (p. 27).)

It is important to note that the definition of “academic dishonesty” has varied over time and that, as Bertram Gallant (2008) explains, “definitions and meanings of academic misconduct are dynamically shaped by context and events” (p. 29). Researchers have shown that these varying definitions are more likely to explain reports of increases in cheating, rather than are actual increases in students’ cheating (Brown & Emmett, 2001). Bertram Gallant (2006) explains that the definition of cheating is determined by institutions and faculty members, and applied to students. She says:

The research on academic dishonesty has focused on the agency of the student to resist engaging in academic honesty, and, in a more minor way, the agency of the faculty to reduce or stop academic dishonesty in their classrooms. This implicitly frames the student as the problem and the faculty as part of the solution. (Bertram Gallant, 2006, pp. 7-8)

In other words, students’ and faculty members’ disagreement about whether unpermitted collaboration on homework assignments is cheating could be framed as students’

unwillingness to accept academia's current conceptualization of cheating. Duke University faculty members reported evidence of a growing reluctance by students to agree with administrators' and faculty members' framing of out-of-class assignments as cheating, saying, "we believe that students today feel freer to define what is and is not cheating" (Pickus & Shanahan, 2012, para. 4).

McCabe, Butterfield and Treviño (2012), acknowledge the same in their research: "although we cannot cite quantitative data to support our view, we believe that students today feel freer to define what is and is not cheating in their own self-interest than did students in 1990/1991" (pp. 175-176). Similarly, and specific to this study, a team of researchers reporting on the results of a study that engaged 450 students, said: "It appears that there is no consensus on the boundary between collaborative behaviour and collusion" (Scrimshire, Stone, Kisamore, & Jawahar, 2017, p. 15). For example, Barrett and Cox (2005) described unpermitted collaboration on written assignments as "plagiarism" to the students in their study and defined it as "students working together but passing the work off as individual" (p. 111). They also told their student participants that "legitimately discussing work, a student offering advice to another, and a student correctly referencing a source" was allowed. (p. 107). Nevertheless, even with this generous definition, 17% of the students said "some effort was taking place with collusion" and 13% claimed "collusion promoted learning" (p. 107).

Unfortunately, the longitudinal record on cheating is primarily quantitative, and its results, while powerful, are not nuanced (McCabe et al., 2012). This trend began with Bowers, who made asking students about their own cheating the standard in academic

integrity research. Prior to Bowers, what little research existed was primarily conducted by either observing students taking tests in experimental settings or by surveying students about their observations or impressions of their classmates (Bertram Gallant, 2008; Campbell, 1935; Minor, 1930; Strang, 1937; Wrightsman, 1959). Bowers (1964) queried students regarding their participation in 13 acts of academic dishonesty. His list of infractions has since been mimicked by other researchers, contributing to the continuity of today's research record (McCabe et al., 2012). Bowers' report describes respondents' dispositional factors and how they did or did not correlate to student cheating. He also collected data on honor codes but did not publish it (McCabe et al., 2012).

During the 1992-93 school year, business professors McCabe and Treviño recreated Bowers' study. They surveyed 1,800 students at nine of the same campuses, all medium to large public universities (McCabe & Treviño, 1993). They found some change in overall student cheating on the nine measures shared by the surveys. Eighty-three percent of the students in the 1962-63 survey had participated in one or more of the cheating behaviors, and 87% admitted to the same in the 1992-93 study (McCabe et al., 2012). Other researchers have had similar results. For example, Josien and Broderick (2013) reported on survey results from 1980 and 1992 in which 76% and 87% of students, respectively, had cheated. Whitley (1998) analyzed the results of 107 studies on cheating published between 1970 and 1996 and found a broad range of rates of reported student cheating, from 9%-95% with a mean of 70% of students participating. In addition, McCabe reported a broad range a students' engagement in cheating on individual campuses: "On every campus studied over the years (now approaching 200

campuses), there was a cluster of students who felt there is no cheating, while at the same time a cluster felt that cheating was rampant” (D. McCabe, 2016, p. 197). These results demonstrate what Hinman (2002) calls the “20-60-20 rule” (p. 31): 20% of students (or less) will not cheat, 20% (or more) cheat regularly, and “The middle sixty percent is the interesting group, for these are the students who can go either way” (p. 31).

McCabe, individually and with others, continued to research academic integrity, and more than 150,000 students have now completed his surveys (McCabe et al., 2012). He is a spokesperson for the International Center for Academic Integrity (ICAI), which he helped create in the early 1990s (McCabe et al., 2012; McCabe & Pavela, 2000). Institutions and researchers gain access to McCabe’s survey instrument through ICAI, which provides schools with comparisons of their results and the extensive data that McCabe has amassed (Lang, 2013c). McCabe has published or co-published more than 50 articles on academic integrity (Lang, 2013c). There are almost 1,200 dissertations in The University of Texas at Austin’s library database that were authored in the last ten years (2000-2017), use “academic integrity” as a keyword, and cite McCabe. Through these venues, McCabe’s work has had a profound impact on the beliefs in both academia and society regarding academic integrity.

McCabe and Treviño, along with a third business professor, Butterfield, summarized the survey data from more than 11,000 student survey responses in 2001 (p. 224). The results of a Google Scholar search show that the article, *Cheating in Academic Institutions: A Decade of Research*, has been cited more than 500 times. In 2012, they published a book with the results of more than 150,000 surveys (McCabe et al., 2012). In

it, McCabe, Butterfield, and Treviño (2012) wrote that more than two-thirds of students have reported they have cheated. Bowers' along with McCabe and his colleagues' research form much of the longitudinal record on cheating, and have shaped institutions' response to the problem of academic misconduct.

Butterfield, and Treviño (2012) found that men were more likely to cheat than are women, as have most other studies. They found that younger students cheated more than did older students, students with low grade point averages cheated more than did those with higher GPAs, students engaged in extracurricular activities cheated more than less active students, and students in fraternities and sororities cheated more than did students who were not involved in the Greek system (McCabe et al., 2012). As they discuss in their book, McCabe, Butterfield, and Treviño's (2012) results were similar to that of other researchers. For example, in his metastudy, Whitley found that younger and unmarried students were more likely to cheat than were their older and married classmates, that men were more likely to cheat than women, and that students with low GPAs and students in fraternities and sororities were somewhat more likely to cheat (Whitley, 1998). Whitley (1998) found these student attributes to have only a "medium effect" on cheating when he sorted his studies' findings into large, medium, and small effects (pp. 257-258). In his survey of the research studies, Whitley said cheaters have moderate expectations for success, have cheated in the past, have poor study skills, party more frequently, hold favorable attitudes toward cheating, perceive that social norms allow cheating, see themselves as less honest, are matched on locus of control and task type, and anticipate great reward for success (pp. 257-258).

More recently, and specific to the phenomenon I am studying, McGowan (2016) asked students and found that the four most common types of reasons students provide for collaborative breaches of academic integrity are: 1) Related to assessment items (assessment if too difficult, easy, or time consuming or has a due date that conflicts with other responsibilities); 2) To help a friend or classmate, 3) Due to a misunderstanding the rules for collaboration, or 4) Because the student does not expect to get caught. McGowan (2016) also shares a summary of several researchers' results regarding students reasons for collaborative cheating: Poor integration into the community (poor attitude, lack of self-confident); learning orientation; poor study skills; low grades; past involvement in cheating; peer's behaviors, and type and design of assessment (McGowan, 2016, p. 236).

Like others, McCabe, Butterfield, and Treviño (2012) considered contextual influences, and found they often influenced student cheating. Their research shows that "academic dishonesty is significantly lower in honor code environments" and advocate for their implementation (2012, p. 102). In addition, McCabe has written repeatedly about institutions' successful implementation of honor codes and has advocated for their expanded use (McCabe, 2005a; D. L. McCabe, 2016; McCabe et al., 2012; McCabe & Pavela, 2000; McCabe & Treviño, 1993, 1996, 1997; McCabe et al., 2001). When making a case for honor codes, McCabe, Butterfield, and Treviño (2012), report they are effective if they are embedded in the institutions' culture, rather than just "window dressing" (p. 106) and, if done correctly, they can have a life-long impact on students' ethical frameworks. They have reported that the cultures at honor code institutions can

influence both students' and faculty members' attitudes and behaviors (2012). McCabe and his colleagues' work has motivated many researchers to study honor code schools. For example, Bing, Davison, Vitell, Ammeter, Garner, and Novicevic (2012) published the results of an experiment in which students were divided into four groups and faculty members verbally provided one group with a "honor code reminder" that explicitly defined unacceptable (cheating) behaviors; one group with a "realistic course warning" that included descriptions of cheating, information on how it is detected, and details about the punishment it will incur; one group with both the honor code and realistic course warning messages; and then one group (a control group) received no messages (Bing et al., 2012, p. 32). One-half (50%) of the control group (the students who heard neither message) reported cheating, 29% of the students who heard the honor code reminder admitted to cheating, and 26% of the students who heard the realistic course warning went on to cheat (2012). The lowest rate of cheating was by students who heard both messages: they cheated at a rate of 12.5% (2012). McCabe has identified three additional contextual factors that are also important: 1) the influence of peers, 2) a culture of integrity on campus, and 3) opportunities to cheat (D. L. McCabe, 2016; McCabe et al., 2012).

**Influences of peer behavior.** Researchers are increasingly finding that a student's beliefs about and knowledge of their peers' academic dishonesty can have a significant impact on a student's decisions regarding cheating. "Students cited social pressure from other students as a primary contributor to their senses' of academic integrity" (Young, Miller, & Barnhardt, 2017, p. 12). In other words, a student's belief

that his/her classmates' are cheating is the best single predictor of cheating (McCabe & Treviño, 1993). Witnessing cheating is also a strong predictor of cheating (O'Rourke et al., 2010). Moreover, if a student believes his or her peers' cheating is accepted by others, they are more likely to cheat themselves (Vandehey, Diekhoff, & LaBeff, 2007). Spear and Miller (2012) reported that students are most influenced by knowing about or observing academic dishonesty by a peer with whom they have a relationship, and they are also more likely to cheat with a friend: "Given the inherent risks associated with cheating" the students in their study "were more likely to help a friend as opposed to a stranger cheat" (p. 198). Also, McGowan (2016) suggested there may be a connection between institutions' encouragement of peer and study groups and students' increased permitted and unpermitted collaboration:

The establishment of peer groups and the forming and facilitations of relationships and group study routines may explain, at least in part, the increasing incidence of academic misconduct (including collusion) as students progress through their degree. ... Not only does the formation of such groups provide the opportunity for solutions, but also group norms for collaboration, assisting group members, and loyalty to peers are likely to override ethical considerations." (p. 231)

Other researchers have, similarly, reported that, while out-of-class campus engagement (such as clubs and organizations) supports students' college success, it can also lead to increased cheating (McCabe et al., 2012; McCabe & Treviño, 1997; Yu, Glanzer, & Johnson, 2017).

**Cultures of integrity.** "The extent to which there is a culture of engagement, honesty, and reporting will impact the decisions made by students" (Brimble, 2016, p. 373), making campus cultures another powerful influencer on students' decisions to



cheat. For example, “cheating and helping others cheat, over time can create a culture in which cheating is viewed as acceptable and may even be considered a norm”

(Scrimshire et al., 2017, p. 18). Campus culture can also have a positive impact on students’ cheating decisions:

The extent to which campus climate encourages a holistic and positive academic climate, and the extent to which students view campus policies as working to reduce cheating, consistently influence the probability of students’ developing a greater understanding of academic integrity. (Young et al., 2017, p. 9)

In addition, institutional programming can play a role in creating positive cultures in which students are less likely to engage in academic dishonesty:

An important element of the management of academic dishonesty is to provide students with relevant education and training on expected behaviors, including how to avoid inadvertently ‘cheating’ ... as well as a framework for managing ethical dilemmas. (Brimble, 2016, p. 370)

For example, Kolb, Longest, and Singer (2015) collected students’ statements about the reasons not to cheat at the beginning and end of the students’ first semester and identified six reasons, all of which could be impacted by institutional programming:

1. The potential reward is not worth the risk;
2. “Barriers to consideration”—or, students do not cheat because they cannot envision not getting caught (p. 7);
3. Fear of punishment;
4. Institutional policies;
5. “Learning goals,” or, “they want to succeed on their own merit and are striving to learning as much as they can during their four years in college” (p. 9), and
6. “Internalized ethical beliefs”—students who “do not cheat because they find cheating to be immoral, unethical or simply, ‘not right’” (p. 11).

Also, as indicated earlier, some sub-cultures within the university (for example some clubs, organizations, and academic programs) contribute to academic dishonesty. Other sub-cultures support academic integrity. Researchers are increasingly finding that one positive influence is participation in religious activities during college (Nelson, James, Miles, Morrell, & Sledge, 2017; Rettinger & Jordan, 2005; Scrimshire et al., 2017; Yu, Glanzer, & Johnson, 2017; Yu, Glanzer, Sriram, Johnson, & Moore, 2017).

***Engagement in religious activities.*** Research shows that students generally become “more committed to integrating spirituality into their lives as they progress through their college years” (Nelson et al., 2017, p. 395). Rettinger and Jordan (2005) used a goal-orientation framework when looking at students dually enrolled in a traditional undergraduate program studying business or liberal arts and a Jewish studies program, and found that there was more cheating in non-religious classes (and less cheating in the Jewish studies program classes). Regarding the correlation between religion and cheating, they reported:

- “Increased religious observance leads to less grade motivation in religious studies courses, which in turn leads to less cheating” (p. 120);
- “Grade orientation is strongly correlated with self-reported cheating in Jewish studies and college courses, and learning orientation is negatively correlated with cheating in Jewish studies courses” (p. 122); and
- “Among religious students, more religiosity is correlated with reduced cheating in all courses. This finding is due to the unique effect of religion on cheating rates and, depending on course content, on a reduction of grade orientation in religious students” (p. 125).

In summary, they, “attribute different cheating rates to the relation between the content of the classes and the attitudes of the students. In particular, students’ religiosity and

attitudes toward courses impact each other and cheating behavior” (Rettinger & Jordan, 2005, p. 120). Other, newer studies also show that a student’s participation in religious activities in college can influence his/her decisions about cheating, but this has not always been the case:

With regard to religion, studies divide fairly evenly between older publications finding that religiousness has little or no effect on academic cheating intentions or behaviors (Bruggeman & Hart, 1996; DeVries & Ajzen, 1971; Michaels & Miethe, 1989; Smith, Ryan, & Digging, 1972) and the more recent research claiming that religious behavior (e.g., religious service attendance) is positively associated with academic honesty (Bloodgood et al., 2008; Burton, Talpade, & Haynes, 2011; Perrin, 2000; Rettinger & Jordan, 2005). (Yu, Glanzer, Sriram, et al., 2017, p. 404)

For example, in one recent study completed at four business schools, researchers found that religion, in particular, participation in religious services or activities, is a predictor of millennial students (ages 18-27) attitudes toward cheating and cheating behavior:

Students who behaved in “religious activities” also demonstrated more academic integrity. The act of attending church and participating in other religious activities likely reinforces the positive and ethical behaviors of students by keeping their values salient to them. In this case, students’ strong attitudes toward attending church and participating in other religious activities increase awareness of right and wrong, resulting in academic integrity. (Nelson et al., 2017, p. 395)

The authors explain that, “Sometimes the engrained religious beliefs are so strong that the dissonance between religious attitudes and cheating behavior creates internal conflict when millennials realize that their behaviors do not align with their attitudes” (p. 389). Similarly, Yu, Glanzer, and Johnson (2017) summarized five studies, published between 2000 and 2011, “which highlighted the importance of religious behaviors over religious identity and belief when it comes to academic dishonesty,” by saying:

With regard to religion, the authors found that both students' religious identity and their expressed support for religion made no significant difference in their engagement with academic honesty. Yet the authors also determined that students who attend religious services more frequently were less likely to be engaged in academic dishonesty than students who attend less frequently, even after controlling for other explanatory factors such as gender and students' attitude toward academic cheating. (p. 45)

**Neutralization.** While we would assume that “logically, a student’s moral attitude toward cheating should affect behavior because the decision to cheat is a question of ethics” (Spear & Miller, 2012, p. 203), researchers have found that “attitudes that enable people to justify unethical behavior” allows many students to act outside of their values and participate in academic dishonesty nevertheless (Spear & Miller, 2012, p. 197). This is called “neutralization”:

This theory explained deviant behavior while accounting for the observation that most people who commit deviant acts do so as an aberration; those who on occasion perform deviant act are nondeviant most of the time. Neutralization proposes that a person, as a precursor to acting in a deviant way, justifies or rationalizes why it is okay for him to perform that act in that particular situation; furthermore, that said person generally agrees that committing the act in question is wrong. (Beasley, 2014, p. 241)

Returning to Rettinger and Jordan’s (2005) study of students enrolled in a traditional and a Jewish studies program, for example, they found that neutralizing attitudes were strongly correlated with cheating in college courses, but not in Jewish studies courses. (p. 123). Scrimshire, Stone, Kisamore, and Jawahar (2017) summarized several studies in their description of how neutralization plays a role in students’ cheating decisions:

Because one of the best predictors of cheating is the perception that others cheat (Ariely 2012; McCabe et al. 2012), students may justify cheating as a way to “level the playing field” (McCabe et al. 2012). At the same time, students generally believe cheating is wrong (Smyth and Davis 2004; McCabe et al. 2012) and seek to maintain positive self-images (Steele 1988). Thus, cheating for most

students triggers cognitive dissonance (Festinger 1957) which occurs when an individual behaves in ways inconsistent with his or her self-concept (Aronson 1969). In order to cope with this dissonance, students may seek to justify the incongruity between their own beliefs and actions. For instance work by Haines et al. (1986) found that cheaters invoked more justifications than non-cheaters and Daniel et al. (1991) found a strong relationship between the number of justifications students gave and cheating. (p. 5)

Some of students' neutralization behaviors were identified by Beasley (2014), and include blaming and unfair educational system, and "condemning the condemners" or blaming faculty members, teaching assistants, or university staff members for inaction, a lack of empathy, or uninteresting classes, (pp. 242-246).

Before we leave the topic of academic integrity and religion, it is important to note that some researchers conflate religion and ethics in their studies of honor codes. For example, in the section in their book titled "Honor Codes are Effective in Promoting Integrity and Reducing Cheating," McCabe, Butterfield, and Treviño (2012) cite as an example a study in which groups of students are asked to write down a list of books they read in high school or the Ten Commandments prior to taking a test, and a control group was not asked to write anything. The students who wrote the list of books cheated more than the control group, and the students who wrote down the Ten Commandments did not cheat at all (2012). When discussing these results, the McCabe, Butterfield, and Treviño (2012) say:

Even those students who could recall only one or two Commandments seemed to be equally affected by this experiment, and thus the researchers concluded that it may have been "the mere contemplation of a moral benchmark of somekind" that was the causative factor here and wondered whether "nonreligious benchmarks" (Ariely 2008, 285) might work in a similar way—such as a professional oath or, more germane to our interest, an honor code. (p. 103)

*The role of the faculty member.* Lang (2013c) said that faculty members are a significant part of the problem, when it comes to academic integrity, and also a part of the solution. For example, when reflecting on 15 years of academic integrity research, McCabe (2016) noted that, “When students were asked about motivations to cheat, two reasons have been repeatedly offered more than any others: firstly, professors have not made the rules clear, and secondly, the student must get an A grade” (p. 193).” More specific to this study, McGowan (2016) explained that faculty members may play a role in students’ engagement in unpermitted collaboration: “The switch between encouraging and requiring group work, and then requiring individual work, can legitimately cause confusion, particularly where the rationales for these variations in requirements are not made explicit” (p. 231). Beasley (2014) asked almost 300 students who had been caught cheating: “What, if anything, would have stopped you from committing your act of academic dishonesty?” (p. 229). Their answers can be sorted into seven categories of reasons for cheating, some of which faculty members may be able to influence: 1) ignorance of consequences, 2) lack of knowledge of the rules, 3) neutralization, 4) time, 5) need for a high grade, 6) stress, and 7) peers (p. 233). For example:

“Positive interactions with faculty members ... influence students’ sense of academic integrity. Faculty members who provide students with challenging coursework, demonstrate a strong sense of academic integrity, and encourage conversation about academic dishonesty can strongly affect students.” (Young et al., 2017, p. 13)

In addition, faculty members can “encourage students’ intrinsic motivation, foster a culture with a focus on mastery (rather than grades), include low-stakes assessments, and encourage students to be confident but also realistic about their academic abilities and

habits” (2013c, p. 59). Tricia Bertram Gallant (2017) uses a goal orientation framework when proposing five strategies for faculty for encouraging students to focus on mastery rather than performance. First, to provide the “perception of good, competent instruction,” the faculty member should, “demonstrate passion and enthusiasm for the content being taught” (p. 89). Second, “an instructor must fulfill the basic organizational duties of a teacher” (p. 90). Third, faculty members should align course objectives with teaching strategies and student assessments. Fourth, “it is not only critical that they clearly explicate how students should complete the assessments ... but why those methods are important,” (p. 91). And finally, faculty members “see cheating as creating teachable moments because the experience can be transformed into new knowledge” (p. 92). As she explains, improving instruction is crucial to the teaching and learning approach to addressing academic dishonesty, because students will use poor instruction as an excuse to cheat to complete their work (2017). Citing six sources from 1999-2006, Spear and Miller (2012), also provide suggestions for faculty members wanting to reduce academic dishonesty:

- Address academic dishonesty early on. Include a section about it in the syllabus and use that to engage students in a class discussion.
- Use plagiarism detection software, and create and use a database of past students’ submissions. Monitor students during exams.
- Relieve student stressors by providing several opportunities for assessment rather than one or a few high-stakes assessments
- Creating fair and reasonable tests, multiple versions of tests, and/or unique assignments for each semester,

- Foster group norms supporting honesty, establish relationships with individual students.
- Engage students who are not doing well to proactively reduce and/or prevent academic dishonesty.

In their research, Spear and Miller (2012) experimented with the efficacy of two frameworks for faculty-student discussion and faculty action: 1) moral appeals and 2) fear appeals. “The goal of moral appeals is to persuade people to behave in ways that are consistent with their preexisting moral beliefs. Moral appeals operate in part by arousing cognitive dissonance in hearers” (p. 198). The authors explain that we want to perceive ourselves positively and when our actions conflict with our ability to think about ourselves that way, we are driven to end the uncomfortable feeling we experience. We accomplish this, the authors say, by realigning our actions and our self-concept. In other words, “people will be motivated to engage in behavior change when the hypocrisy of their attitudes and actions is made more salient” (p. 198). A fear appeal is a persuasive communication that generates scares students by depicting the negative consequences of cheating “in an extreme, highly disturbing way” (p. 198). For a fear appeal to work, the student must believe in both the threat and that they may get caught. Through their experiment, Spear and Miller (2012) found that students’ participation in academic dishonesty could be predicted by self-reported neutralization and the social norms of their classmates. But, it was not correlated with the moral norms of their classmates nor the perceived threat of the fear appeal (2012). In addition, the students for whom the moral appeal was impactful were also more likely to have neutralizing attitudes (2012). Finally,



regardless of the appeal they heard, some students reported being aware of and influenced by peers' cheating (2012).

Yu, Glanzer, and Johnson (2017) believe faculty (and staff) members can help students navigate opportunities to and decisions about cheating. It is, they say:

Important to recognize that academic leaders, teachers, and student affairs professionals can also attempt to shape the information systems (i.e. the peer environment and the individual student experiences) by promoting role models, rituals, language, and myths/stories within the information culture to attempt to alter first-year students' attitudes regarding previous academic misconduct behaviors. (Yu, Glanzer, & Johnson, 2017, p. 51)

McCabe, Butterfield, and Treviño concur, and say that faculty members are required to, “challenge students’ thinking” about their ethical beliefs and actions, “both inside and outside the classroom” (p. 165):

“We believe strongly that, as educators, we should take on this responsibility, because we are educating the leaders, manager, and professionals of tomorrow. We have a moral obligation to teach our students that it is possible and preferable to live and operate in an environment of trust and integrity where cheating is simply unacceptable.” (McCabe et al., 2012)

While Lang (2013c) agrees that educators can and should take responsibility for being a part of an institutional community's efforts toward creating a culture of integrity, he does not agree that the focus should be on the student. “Much of the research and advice on cheating available to us these days focuses,” Lang (2013c) says, “on the learner, and on how we can better police or modify the learner” (p. 38).

**Opportunities to cheat.** Instead of a focus on changing students, Lang (2013c) recommends we work to change institutional cultures and learning environments:

The approach I am advocating here is not meant to supplant or replace [student-centered] strategies, which can be valuable and effective. But focusing on the

learning environment will not only provide an important and potentially effective tool to reduce cheating in our classes—it can also create a sense of empowerment in individual faculty members, who might feel uncertain about their ability to cultivate virtues in their students or police more vigilantly for cheating in their courses. (Lang, 2013c, p. 38)

One key aspect of the institutional culture and the decisions students make within it is the frequency with which students encounter opportunities to cheat. For example, “Students reporting cheating more often in classes required for their major than nonmajor classes” in a study completed by Yardley, Rodriguez, Bates, and Nelson (2009), who speculated, “it may reflect the fact that students may know more of their peers in classes for their major and thus have more opportunities to engage in social forms of cheating” (pp. 9-10). In addition, more recently (and more on point), Scrimshire, Stone, Kisamore, and Jawahar reported that 54% of the students in their study (of almost 1,900 students) said they had been offered opportunities to cheat collaboratively and that they were most likely to accept the offer if it was made by a friend (2017).

In a research conducted at 31 highly selective institutions and institutions, about 1,700 of more than 5,000 students surveyed wrote at least one comment that “suggested that individual faculty members can decrease cheating in their classes by reducing perceived opportunity” (McCabe et al., 2012, pp. 126-127). And Sutton and Taylor (2011) provide some insight into these needs and the difficulties of addressing them in their report titled “Confusion about Collusion,” in which they share the results of their study of 1,000 students’ beliefs about and behaviors regarding collaborative cheating:

A strong theme was that students wanted guidance on what was right rather than being repeatedly told what was wrong. Overall, they are looking for clear guidance on best practices rather than warnings not to do things and examples of

what not to do. This is a particular challenge as this clear guidance as to what is acceptable in cooperative endeavour with others in individual assessed coursework does not appear to exist. (p. 838)

Others recommend that students be exposed to information about what is allowed early on in their college careers, to support the development of a culture of integrity (Kolb et al., 2015). “Writing intensive first-year seminars,” for example, “are well situated in college curriculums to cover issues like academic integrity because they occur early in students careers” (p. 2). While this educational approach has been shown to be effective, threats by faculty members is not. Spear and Miller (2012) found no significant relationship between faculty members’ threats of severe repercussions for cheating. Instead, students “looked to their peers” cheating behaviors, and followed that lead, in the face of faculty members’ threats (p. 205). In addition, “students are very unlikely to report another student [for cheating], especially a friend” (D. McCabe, 2016, p. 197).

### **MORAL DEVELOPMENT AND GOAL ORIENTATION THEORIES**

Moral development theory has historically been used to frame academic integrity research (for example, see Bertram Gallant, 2008; Bushway & Nash, 1977; Kibler, 1988; McCabe et al., 2012; Strang, 1937; Whitley, 1998; or, Wrightsman, 1959). In addition, it typically drives the choice of techniques by which institutions promote academic integrity and respond to academic dishonesty (Gallant, 2006, 2008; McCabe et al., 2012; Nuss, 1988). More recently, goal orientation theory has is being referenced in the literature on cheating (Eric M. Anderman & Tamera Burton Murdock, 2007). Solutions to cheating that represent this framing are increasingly being recommended to faculty

members (Eric M. Anderman & Tamera Burton Murdock, 2007; Lang, 2013c; Murdock & Anderman, 2006).

**Moral development theory.** The purpose of moral development theory is to understand the process by which individuals make moral judgments. Kohlberg proposed moral development theory when studying children while in graduate school (Evans, Forney, Guido, Patton, & Renn, 2010). Kohlberg described moral decisions as those that rely on values rather than facts, and impact at least one other person, and requires the individual to act (Evans et al., 2010). “He argued that people actively give meaning to their social interactions and construct their perception of the social world” (Rest, Power, & Brabeck, 1988, para. 6). This challenged the socialization approaches popular at the time when he wrote that he assumed personality (and its’ attributes, such as morality) was primarily formed by cognitive means (Power, 2003; Rest et al., 1988). Kohlberg thought this “trivialized” moral development and reducing it to “the simplest mechanisms of human functioning” (Power, 2003, p. 1377). Kohlberg created a moral education program that he said would stimulate the “‘natural’ development of the individual child’s own moral judgment and capacities, thus allowing him to use his own moral judgment to control his behavior” (1980, p. 72).

Kohlberg conceptualized an individual’s maturation as resulting from of a progression through three levels: preconventional, or an “individual perspective”; conventional, or a “member-of-society perspective”; and, postconventional, or a “prior-to-society perspective” (Kohlberg, 1976, pp. 33-35). Each level is divided into two stages (1976), summarized in Table 2.3. An individual’s movement through these stages

resulted from developmental crises (Power, 2003). Each stage in Kohlberg's theory represents a "different conception of right and wrong," (Chickering & Reisser, 1993, p. 18). As individuals progress through the stages, they shift from concrete to abstract thought, and from self-interest to a desire for justice and equality (1993). For many young people, the shift from conventional to post conventional thinking happens while in college (Pascarella & Terenzini, 2005). During this time, individuals transition from dependence on "moral reasoning that concedes to societal authority" to "reasoning that is based on the application of universal moral principles" (p. 367). An individual's ultimate goal is to view and act in the world through the lens of justice seeking (Kohlberg, Levine, & Hower, 1983).

Table 2.3: Summary of Moral Development Theory Levels and Stages

Level or Stage	Description
Level 1: Preconventional – Individual has no understanding of societal norms	
Stage 1: Heteronomous morality	<ul style="list-style-type: none"> <li>• “Right” is synonymous with following rules</li> <li>• Actions designed to avoid punishment</li> </ul>
Stage 2: Individualistic, instrumental morality	<ul style="list-style-type: none"> <li>• “Right” is synonymous with following rules, if in the best interest to do so</li> <li>• Awareness of others leads to understanding of fairness and agreement</li> </ul>
Level 2: Conventional – Individual understands societal rules and works to please authorities	
Stage 3: Interpersonality normative morality	<ul style="list-style-type: none"> <li>• “Right” based on expectations of individuals in close relationships</li> <li>• Actions designed to gain others’ approval</li> <li>• Shared feelings and agreements are prioritizes</li> </ul>
Stage 4: Social system morality	<ul style="list-style-type: none"> <li>• “Right” is a consistent social system that applies equally to all</li> <li>• Action designed to fulfill societal obligations</li> </ul>
Level 3: Postconventional – Individual understands self-identified principles and separates themselves from rules and expectations	
Stage 5: Human rights and social welfare morality	<ul style="list-style-type: none"> <li>• “Right,” including laws and social systems, and are judged on whether they promote human dignity</li> <li>• Individuals aware they have free will regarding social contracts</li> </ul>
Stage 6: Morality of universalizable, reversible, and prescriptive general ethical principles	<ul style="list-style-type: none"> <li>• “Right” involves equal consideration of all viewpoints</li> <li>• Decisions are based on universal ideals, such as human rights</li> <li>• Only fairly negotiated agreements are valid</li> </ul>

Note. Adapted from “Student Development in College: Theory, Research, and Practice,” by N. J. Evans, D. S. Forney, F. M. Guido, L. D. Patton, and K. A. Renn, 2010, pp. 101-105; Copyright 2010 by John Wiley & Sons, Inc. and, “Moral Stages and Moralization: The Cognitive-Developmental Approach,” by L. Kohlberg, in T. Lickona (Ed.), “Moral development and behavior: Theory, research, and social issues,” 1976, pp. 31-53; Copyright 1976 by Holt, Rinehart and Winston.

Kohlberg and his colleagues dedicated 30 years to longitudinal research to refine and validate his theory (Power, 2003; Rest et al., 1988). In the mid-1970s, he and a group of colleagues at Harvard “undertook a drastic revision of stage definitions, lasting almost an entire decade,” which led to a more complicated version of the theory (Rest et al., 1988, para. 5). By Kohlberg’s death in 1987, hundreds of studies had been completed, “showing that a person’s stage can be reliably diagnosed and their moral logic determined” (para. 10). His research also found that individuals’ progression was always forward (or stagnant) along the developmental stages, and that any forward movement was irreversible (Rest et al., 1988). Eventually Kohlberg claimed that his moral stages were universal to all societies and cultures (Power, 2003).

Kohlberg “saw moral atmosphere as a mediator between individual moral judgment and moral behavior” (Rest et al., 1988, para. 13). Just prior to his death, Kohlberg and Candee summarized the research supporting a connection between moral beliefs and action, stating, “there is a correlation between relatively high moral judgment and what is commonly considered to be moral behavior, including honesty, resistance to temptation, and altruism” (Kohlberg & Candee, 1984, p. 52). They explained that studies had found that an individual’s stage impacted his or her behavior through two judgments, or decisions, “one deontic” and “one of responsibility” (p. 70) They also clarified what made moral action “right”:

In the weaker sense, right action is any action consistent with the actor’s own deontic decision of what is right. ... In the stronger sense, morally right action is that which would be chosen by Stage 5 moral principles and which is, in fact, carried out with at least an institutive sense of those principles in mind. (Kohlberg & Candee, 1984, p. 70)

More than 75 years of literature on academic integrity demonstrate that many (if not most) researchers and educators use moral development theory to make sense of their work (for example, see Bertram Gallant, 2008; Bushway & Nash, 1977; Kibler, 1988; McCabe et al., 2012; Strang, 1937; Whitley, 1998; or, Wrightsman, 1959). Nuss encouraged its use, saying “the effectiveness of the measures which colleges and universities take to enhance academic integrity can be improved if they are planned within the context of moral development theory” (1988, p. 16). Moreover, the idea that higher education plays a role in creating an ethical society is deeply embedded in discussions about academic integrity. Academic dishonesty, explained Mawdsley (1994), “speaks to the heart of higher education because it touches not only upon the related concerns of research, scholarship and learning, but upon the purposes of a college or university” (p. 1).

“College is linked with statistically significant increases in the use of principled reasoning to judge moral issues” (Pascarella & Terenzini, 2005, pp. 345-346). There’s evidence that a “substantial part of the growth in principled reasoning that occurs during college is uniquely attributable to the college experience itself” (p. 367). Additionally, students’ moral development persists after graduation (King & Mayhew, 2002, pp. 249-250). “Evidence from 10- and 20-year longitudinal studies was clear in identifying the positive, long-term influence of college on principled moral reasoning” (Pascarella & Terenzini, 2005, p. 365). Also, there’s substantial proof of a positive relationship between an individual’s level of moral reasoning and the likelihood of moral actions (Bowen, 1997, p. 121). Therefore, explains Bowen, “growth in principled reasoning during college



should, at least indirectly, increase the probability of principled action” (p. 121). McCabe encouraged the adoption of moral development efforts as part of an institutions’ academic integrity programming, saying, “our goal should not simply be to reduce cheating; rather, our goal should be to find innovative and creative ways to use academic integrity as a building block in our efforts to develop more responsible citizens” (2005b, p. 29). As King and Mayhew explain, “development occurs in context,” and “colleges offer excellent contexts to stimulate moral reasoning” (2002, p. 257).

The Duke University faculty members who compared campus surveys from 2005 and 2011, discovered their survey results allowed them to divide students into three categories of respondents (Ariely et al., 2012). Fifty-seven percent of students indicated they did not act dishonestly in school or life, and 7% reported the opposite (they were generally dishonest in both school and life) (2012). In addition 35% of students acted honestly except in specific circumstances, and the most likely circumstance to cause these honest students to act dishonestly was unpermitted collaboration (2012) . Says O’Rourke (2010):

Cheating can be viewed as both a moral and a social decision. One might expect that a students’ attitude about how right or wrong he or she personally believes cheating to be is considered to be of utmost importance. However, those who believe cheating to be wrong still do it. (p. 47)

McCabe (2005b) concurs, saying: “Values are not an adequate predictor of cheating behavior” (p. 28). Cheating can be situational for many students (King & Mayhew, 2002). “Under the right conditions, most people are willing to cheat a little bit” (Gismondi, 2006, p. 2). A number of studies have found that despite believing certain

act are morally wrong, students admit to participating in them nevertheless (McGowan, 2016). Again, neutralization is often at play when this happens.

**Goal orientation theory.** In contrast to educators' use of moral development theory to explain cheating, psychologists have begun to view academic dishonesty through the lens of goal orientation theory, which predicts students' motivations for learning and cheating (O'Rourke et al., 2010). "Goal orientations are the purposes or reasons for engaging in achievement behaviors," and are "highly relevant to learning and instruction" (Schunk, 2012, pp. 183-184).

Goal orientation theory was first proposed by Eison (1981). He conceptualized a dichotomy, and proposed an instrument to identify two types of students he saw in his classroom: "Anyone who has ever taught a college class will recognize that some students seem largely preoccupied with the pursuit of grades while others appear genuinely committed to the process of learning" (p. 191). Goal theory includes the study of two different types of achievement goals: mastery and performance goals (Anderman, 2007), which are summarized in Table 2.4. They can also be thought of as task- or learning-involved goals (mastery) and ego- or ability-involved goals (performance) (Rogat, Linnenbrink-Garcia, & DiDonato, 2013; Schunk, 2012). Mastery-oriented students are primarily focused on learning (Anderman, 2007). They are inclined to self-comparison, are interested in self-improvement, and are primarily focused on learning (Anderman, 2007). Students with a "performance-approach" orientation want to be perceived as being superior to their classmates and want to appear competent (p. 90).

Table 2.4: Summary of Goal Orientations

<b>Mastery Orientation</b>		<b>Performance Orientation</b>	
Focus on learning Judge self by self-set standards		Focus on demonstrating ability Judge self relative to others	
<b>Approach Focus</b>	<b>Avoidance Focus</b>	<b>Approach Focus</b>	<b>Avoidance Focus</b>
Motivated to master skills, tasks, learning, and understanding	Motivated to avoid misunderstanding and to be sure to learn	Motivated to be superior, out-perform others, be recognized	Motivated to avoid failure and to keep from looking incompetent

Note. Adapted from “Motivation in Education: Theory, Research, and Applications,” by D. H. Schunk, P. R. Pintrich, and J. L. Meece, 2008, pp. 184-191. Copyright 2008 by Pearson Education, Inc.

Over time, Eison, Pollio, and Milton’s (1986) thinking regarding the dichotomy of the schema shifted to encompass four learning styles based on combinations of mastery and performance orientation. As they explain it:

1. High Learning Orientation (LO)/High Goal Orientation (GO) students are motivated to both learn and to earn high grades.
2. High LO/Low GO students are focused solely on personal growth and educational enrichment.
3. Low LO/High GO students view all aspects of the classroom through the lens of their course grade.
4. Low LO/Low GO students consider both learning and grades as irrelevant. The student’s reason for being in school must be sought outside the context of both. (Eison et al., 1986, pp. 55-57)

In addition, a student may abandon or alter his or her personal goal orientations and adopt those that are stressed in the classroom (Schunk, 2012).

Beginning in the 1990s, Anderman, Murdock, and others have studied the impact of a student’s goal orientation on his or her cheating, and have repeatedly found that

students who have a performance orientation toward their courses are more likely to cheat than are students with a mastery orientation (Anderman, 2007). Anderman and Murdock edited a book, *Psychology of Academic Cheating*, in 2007 that detailed much of this research. In it, Anderman explains that goal orientation theory is the key to understanding the “motivational influences that are reflected by classroom social contexts” (such as “instructional practices, school policies, classroom interactions, student and faculty member characteristics”) that lead to academic honesty or dishonesty (pp. 87-88). In other words, “the most effective means to teach our students are also the most effective means to reduce the incentive and opportunity to cheat” (Lang, 2013c, p. 62). Anderman, Murdock, and other psychologists have found that a mastery-oriented student is less likely to cheat, as that undermines learning (Anderman, 2007). Conversely, a student’s whose goal is performance may cheat if it enables his or her efforts to demonstrate competence (Anderman, 2007). In addition, Murdock and Anderman found that most of the dispositional and contextual factors identified by academic integrity researchers can be related to student motivation (Murdock & Anderman, 2006).

Researchers studying academic motivation and cheating have identified three key questions that drive students’ decision-making related to cheating (Anderman & Koenka, 2017; Murdock & Anderman, 2006). “What is my purpose?” is the first question students ask (Anderman & Koenka, 2017, p. 96). Meaning, “What are my goals for this academic assignment?” (p. 96). Those goals help guide students to a decision about whether or not to cheat. Students also question their own abilities, asking, “Can I do this?” regarding their own competency (p. 96). If the student does not believe he/she has the skills needed

to complete the task successfully, he/she is more likely to cheat (2017). Lastly, students ask: “What are the costs?” (p. 96). “If a student cheats, then the student may experience several types of consequences. These might include (a) getting caught and punished and (b) the cost to self-image, including the guilt one might experience” (p. 96). Anderman and Koenka (2017) provide suggestions to educators, based on this decision-making framework:

1. Emphasize mastery.
2. Do not stress students about grades.
3. Communicate expectations clearly.
4. Do not publicize students’ grades.
5. Talk to students about cheating (pp. 99-100).

Faculty members (and other students) provide goal orientations that intersect with and may contradict students’ goals, and this may influence students’ behavior (Eric M. Anderman & Tamera B. Murdock, 2007). Researchers have found that classroom and organizational structures that encourage a performance orientation to the educational environment may also encourage cheating (Anderman, 2007). Classroom goal orientations, therefore, may play a role in a student’s decision whether or not to cheat, and faculty members can impact or even control them (Lang, 2013c). As O’Rourke (2010) explains it:

The amount of cheating that takes place on our campuses may well depend on the structures of the learning environment. The curriculum requirements, the course design, the daily classroom practices, the nature and administration of assignments and exams, and the student’s relationship with the instructor—all of

those can be modified in order to reduce (or induce, if we wanted) cheating. (p. 48)

Or, as Lang (2013c) says jokingly, “focusing the attention of our students on their grades, and seeking to motivate them either by promising them high grades or punishing them with low ones, thus should have the dual effect of increasing cheating and reducing learning” (para. 9). Because of this, some authors have recommended that educators focus their academic integrity efforts on creating a classroom environment with a mastery orientation (Lang, 2013c; Whitley & Keith-Spiegel, 2002). “The most effective means to teach our students are also the most effective means to reduce the incentive and opportunity to cheat,” explains Lang (2013c, p. 62). In response to these types of recommendations, in their 2012 book, McCabe, Butterfield, and Treviño said:

Although we don’t doubt the usefulness of these approaches to curb cheating in particular classrooms, especially in environments where cheating is currently rampant, these approaches rely on very different assumptions than our preferred approach. The basic assumption that drives these classroom efforts to reduce opportunities for cheating is the belief that students will cheat if given the opportunity and thus individual faculty must strictly control behavior to reduce cheating. By contrast, the ethical community-building approach that we favor assumes that it is ultimately possible to create an “honorable community.” (p. 128)

So, does either of these frameworks help us to understand or address students’ unpermitted collaboration on homework?

**The phenomenon and theories in use.** As demonstrated here, moral development and goal orientation theories are often used to make sense of and address cheating, and each points to a different cause of academic dishonesty (McCabe et al., 2012; Murdock & Anderman, 2006). Despite their differences in opinion, researchers

loyal to both camps agree that cheaters do not intend to and do not learn (Eric M. Anderman & Tamera Burton Murdock, 2007; Lang, 2013c; McCabe et al., 2012; Whitley & Keith-Spiegel, 2002). In contrast, some students say they work together when it is not allowed because of the educational benefits of collaborative learning (Ariely et al., 2012; Pickus & Shanahan, 2012).

The Duke University research included interviews with graduating seniors, making it one of the few qualitative studies on unpermitted collaboration on homework. Duke faculty members, reflecting on the research results, wrote in *The Chronicle of Higher Education* that their students believed that working together when it was forbidden may be appropriate because collaboration is “valuable to the learning process” (Pickus & Shanahan, 2012, para 3). “One student,” said Pickus and Shanahan, “distinguished between outright copying (the kind that requires no effort) and ‘learning through someone else’ (which requires active engagement with the material)” (para. 4). “What I’ve actually done in the past is sit down with people from my class and do it together. Even though I might not know a question, at least I’m learning it through someone else and they can help me through it rather than just copying word for word,” said another (para. 3). In the final research report, the committee wrote that their students believed that “working together on homework assignments was acceptable because it was ultimately the student’s responsibility to learn the material. *How* [authors’ emphasis] they learn is irrelevant” (Ariely et al., 2012, p. 3).

## **SUMMARY**

This chapter explored the academic literature on the phenomenon of permitted and unpermitted collaboration on homework, including research on collaborative learning and academic integrity. It described the some of the primary theoretical constructs through which the two are researched and implemented in higher education, and demonstrated a contradiction between those theories and students' stated reasons for participating in the phenomenon to be studied. The final chapter of this proposal will describe the research methodology to be used.



### **Chapter 3: Methodology**

Collaborative learning has become widely accepted and frequently used in K-12 and higher education classrooms (D. Johnson & Johnson, 2009). Participation in collaborative cheating on homework assignments has similarly grown, and undergraduates admit to it more than any other type of academic dishonesty (McCabe et al., 2012). The last chapter situated the phenomenon of permitted and unpermitted collaboration on homework assignments within the research literature on both collaborative learning and academic integrity. It described social interdependence theory, on which collaborative learning is based. It also described moral development and goal orientation theories, which are often used to explain cheating. Finally, it demonstrated a possible contradiction between those theories' shared assumption that cheaters do not intend to learn and students' statements about their reasons for knowingly participating in unpermitted collaboration on out-of-class assignments. I designed a research methodology to address this potential gap in understanding about students' working together outside of the classroom on assignments intended to reinforce their learning. The purpose of this chapter is to describe the methodology, including the study's design, participants and their selection, data collection instruments and procedures, and the process by which the results were be analyzed.

#### **RESEARCH DESIGN**

The intention of this study made qualitative research techniques appropriate. As Creswell explains:

We conduct qualitative research because we need a complex, detailed understanding of the issue. This detail can only be established by talking directly

with people ... and allowing them to tell the stories unencumbered by what we expect to find or what we have read in the literature. (2007, p. 40)

Qualitative research is called for when the preconceptions inherent in quantitative inquiry would undermine a researcher's ability to deeply understand an issue (Creswell, 2007). Its adherents believe that "external reality is not knowable in any direct and sure way" and that the aim of research is situated in contextual meaning rather than truth (Willis, 2007, p. 194).

An epistemology defines the way in which the researcher knows and learns about the world, and its focus is the nature of our reality and the "basis of our knowledge" (Ritchie & Lewis, 2010, p. 13). A researcher's epistemology defines his or her relationship with a study's participants, beliefs about the nature of truth, and expectations regarding the process by which he or she will acquire knowledge (Ritchie & Lewis, 2010). The guiding theoretical perspective, or epistemology, of this study is interpretivism. It reflects beliefs in rationalism, or "the idea that you can come to know reality by thinking about it," and relativism, or the idea that an individual's reality is based on culture and experiences (Willis, 2007, pp. 48-49). Interpretivism developed in response to the objectivism and rationalism of the natural sciences, which is embodied in the scientific method (Willis, 2007). In addition to rejecting "sterile objectivism," interpretivists believe that understanding is holistic, and that facts cannot exist without context (pp. 52-53). Most importantly, interpretivists reject empiricists' quest to discover "lawlike generalizations," and instead seek understanding (p. 53). A number of frameworks for viewing the world grew from the interpretivists' way of thinking,

including existentialism, constructivism, and Gestalt psychology (Willis, 2007).

Phenomenology, which came from the interpretivist tradition (Willis, 2007) guided this study's design, data collection, and analysis techniques. It is characterized by "thoughtfulness" or "a heedful, mindful wondering about the project of life, of living, of what it means to live a life" (van Manen, 1990, p. 12). As Van Manen (1990) explained:

The point of phenomenological research is to "borrow" other people's experiences and their reflections on their experiences in order to better be able to come to understanding of the deeper meaning or significance of an aspect of human experience, in the context of the whole human experience. ... The deeper goal, which is always the thrust of phenomenological research, remains oriented to asking the question of what is the nature of this phenomenon as an essentially human experience. (p. 62)

Additionally, he wrote that "phenomenology is not an empirical analytic science" and "it does not describe actual states of affairs" (van Manen, 1990, p. 21). That said, phenomenology can help us to understand "common experiences in order to develop practices or policies" in response (Creswell, 2007, p. 60). The purpose of phenomenology is to create a rich description of the issue being studied (Creswell, 2007). According to Seidman (2013), by writing rich descriptions of others' experiences, a researcher can open two avenues for insight:

First, the researcher may find connections among the experiences of the individuals he or she interviews. ... Second, by presenting the stories of participants' experience, interviewers open up for readers the possibility of connecting their own stories to those presented in the study. (p. 25)

The type of problem best suited to phenomenology is one which the goal is to understand the common experiences of the research subjects (Creswell, 2007). Its result is a rich written description of those shared experiences (Seidman, 2013). This

description represents the essence of an experience, free from the “reconstructed logic” of the theories we use to explain life and work (van Manen, 1990, p. 45). As van Manen explains: “In our efforts to make sense of our lived experiences with theories and hypothesizing frameworks, we are forgetting that it is living human beings who bring schemata and frameworks into being and not the reverse” (p. 45). Phenomenology, therefore, will allow me to step back from the current conceptions of the cause of academic dishonesty and attempt to truly understand.

#### **SITE**

The study was conducted at a large, four-year, “more selective” institution (Center for Postsecondary Research, 2017). The record of its students’ involvement in research on academic integrity goes back almost 100 years (The New York Times, 1915). In addition, it was one of 200 schools in Bowers’ landmark study on academic integrity, and one of 33 that participated in McCabe and Treviño’s recreation of it 30 years later (Bowers, 1964; D.L. McCabe, personal communication, December 3, 2010 ).

#### **DATA COLLECTION**

Phenomenological researchers ask participants two broad questions: “What have you experienced in terms of the phenomenon?” and “What contexts or situations have typically affected your experiences of the phenomenon?” (van Manen, 1990, p. 66). To answer these questions, I identified a broad but specific group of participants. Then, I gathered data through in-depth interviews, as well as a pre-interview questionnaire, and detailed field notes. I began with a pilot, to learn more about the study’s potential

participants, clarify the research questions, test the survey and interview protocols, and gain experience with phenomenological interviewing.

**Recruiting participants.** Before beginning the study, I earned approval, from the institution's Internal Review Board (IRB), as demonstrated in Appendix A. Then I used purposeful sampling, a strategy by which participants are selected "because they can purposefully inform an understanding of the research problem and central phenomenon in the study" (Creswell, 2007, p. 125), to identify my participants. Three forms of purposeful sampling were used: maximum variation, chain, and criterion sampling.

The aim of maximum variation in sampling is to find the widest variation within the boundaries of the study (Creswell, 2007; Seidman, 2013). This helped me to recruit an ethnically diverse group of men and women studying in varied academic fields and with a range of expected graduation dates, who could represent the institution broadly. In addition, I used chain (or snowball) sampling, to recruit students who met the study's guidelines "from people who know people who know what cases are information-rich" (Creswell, 2007). In other words, I asked students (study participants and others), and university faculty and staff members to contact potential participants on my behalf. This networking process helped me to recruit the students I needed but also led to some unexpected sub-groups of students within my study participants. I will also posted an announcement in the university's electronic newsletter, an example of which is Appendix B. These two efforts did not generate the number of students I had hoped to engage. So, I returned to the IRB staff for approval for added recruiting methods and was given

permission to create fliers that I hung across campus, the approval for and an example of the flier are Appendices C and D.

Criterion sampling, a quality assurance technique, is when all of a study's participants meet specific qualifications (Creswell, 2007). The most important criterion when selecting individuals for a phenomenological study is the individuals' experience with the phenomenon in question (Creswell, 2007). So, I narrowed my study to:

1. Students who had worked collaboratively on homework assignments with classmates,
2. Traditional undergraduates, and
3. Students who had experienced the institution's culture.

My study participants, therefore, had to be between the ages of 18 and 23 years old, had to be enrolled at the institution full time, and they had to have completed at least two long semesters at the institution. I followed up with interested students with a brief email, recreated as Appendix E, which described the study. The email directed potential participants to an online consent form in Qualtrics, online survey software which the university had approved for all forms of student data (Qualtrics, 2014). The form, Appendix F, described the study, and the student had to complete it to move ahead with the online portion of the study. When the student had done so, he/she was directed to a second online Qualtrics form, Appendix G, where the student created a pseudonym and provided contact information.

**Identifying participants.** Students who completed the contact form were then directed to a third Qualtrics survey, the pre-interview questionnaire, Appendix H. I used

the results of the final online survey to assure that students met the study requirements prior to scheduling interviews, and to gather demographic data and information on the students' campus engagement. With this participant selection technique and parameters, I assured that my efforts were oriented toward the phenomenon in question (Creswell, 2007). As Seidman (2013) explained, "a simple participant information form can be of considerable use throughout" the research process, to facilitate communication, record basic information about the participants, and to educate the researcher regarding the context of the participants' experiences (p. 52). Unfortunately, my forms were not that "simple." The use of three disconnected surveys allowed me to collect consent forms with the students' real names, contact forms with students' pseudonyms, and biographical data without the university's directory information. But, while it assured students' anonymity, and I tried to make it seamless, I did lose potential participants along the way. Also, as one last measure to protect participants, I reiterated the students' rights as described in the consent form at the beginning of each my first interviews. I had the students sign a physical copy, Appendix I, and gave the student a copy as well.

My goal was to engage between 8 and 12 student participants and, in the end, 12 met the requirements of the study and completed all its components. While this is a small number for some research methods, in phenomenological studies "fewer interviews that are thoroughly analyzed are preferable to many interviews that are only superficially explored" (Brinkman, 2013, p. 59). As Brinkman explains, "researchers should interview as many subjects as needed to understand participants' experiences with the phenomenon (p. 59). This concept, called "saturation," calls on researchers to collect participants'

stories until additional information sheds no new light on the phenomenon (Brinkman, 2013; Creswell, 2007; Guest, Bunce, & Johnson, 2006). While saturation is ideal, it's difficult to plan a study based solely on it (Guest et al., 2006). I, therefore, looked to research by Guest, Bunce, and Johnson (Guest et al., 2006) when planning. Their public health study included 60 participants, and they analyzed their data in groups of six as it was collected (Guest et al., 2006). They reported that they identified the basic elements of their final research themes after six interviews, and had 92% of the codes they used to analyze their research in 12 (Guest et al., 2006).

**Pilot study.** A pilot study that allows a researcher to fine-tune the interview protocol is important to a study's success (Glesne, 2011). "After completing the pilot, researchers can step back, reflect on their experience, discuss it with their doctoral committee, and revise their research approach based on what they have learned from their pilot experience" (Seidman, 2013, p. 42). Three undergraduate students that met the study's criteria participated in the pilot study. In consultation with my committee chair, I used what I learned to make minor modifications to my interview protocol and techniques. As the adjustments to my interview plans were minimal, I was able to include the same three students in my final study.

**Interviews.** Phenomenological interviews provided me with an opportunity to collect robust narratives from students (Seidman, 2013). These then served "as a resource for developing richer and deeper understanding of a human phenomenon" (p. 52). My goal as a researcher was to discover the meaning of the students' experiences, which required an understanding of the context within which they occurred (Maxwell, 2005).

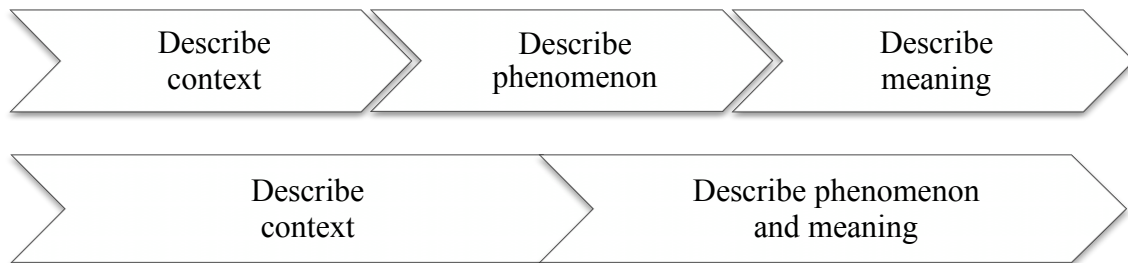


Interviewing was a “valuable way of gaining a description of actions and events—often the only way, for events that took place in the past or ones to which you cannot gain observational access” (Maxwell, 2005, p. 94). Interviews were particularly well suited for investigating the students’ collaboration on homework assignments, as university administrators, faculty members, and staff members rarely observe these student-to-student interactions.

The procedures for interviews were adapted from Seidman’s (2013) model. He recommended three 90-minute interviews, three to seven days apart. In the interviews, the individual is asked to 1) reconstruct his or her life history, 2) describe the details of the experience being studied, and 3) reflect on the meaning of his or her experience (Seidman, 2013). According to Seidman (2013), the researcher’s ability to understand the meaning of the phenomenon is dependent on the foundation established through multiple interviews. He’s also said that his model is flexible, “as long as a structure is maintained that allows participants to reconstruct and reflect upon their experience within the context of their lives” (p. 25). I used two, rather than three, in-depth, semi-structured interviews. They were 60-90 minutes long, and two to seven days apart. The first focused on the participant’s background and life history, especially his or her educational experiences, and the second on the participant’s experiences with permitted and unpermitted collaboration on homework assignments and the meaning he or she places on those experiences. Figure 3.1 shows a comparison of the purposes of the interviews in Seidman’s model and this study’s interviews. I sent participants copies of the interview questions, Appendices J and K, by email prior to each respective interview. Some

students said they reviewed the questions prior to the interviews but most said they did not.

Figure 3.1: Seidman’s three-interview model and the two modified interviews that will be used for this study.



Adapted from “Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences” by I. Seidman, 2013. Copyright 2013 Teachers College.

During the interviews, I was directive but was careful to give the participants control over the way in which they choose to respond (Brinkman, 2013; Moustakas, 2015). I used receptive interviewing techniques—a small number of open-ended questions with follow-up probes (Brinkman, 2013; Creswell, 2007). Receptive interviews are characterized by a negotiation process that creates a conversational flow (Moustakas, 2015). The negotiation process of receptive interviewing can be seen in the interview protocols (Appendices J and K) where potential follow-up questions are italicized. The interview protocols were designed around the study’s research questions and conceptual framework. I designed a matrix, Appendix L, when planning the study, to be sure my interview questions aligned with my research questions. I made audio recordings of the students’ interviews and had them transcribed verbatim.

**Field notes.** I created informal field notes on each step in the research process, including detailed notes immediately after each interview. These helped me to make sense of the data gathered directly from participants. “Writing is closely fused into the research activity and reflection itself” said Seidman (2013, p. 25).

### **THE RESEARCHER’S ROLE**

A qualitative researcher personally collects his or her data from participants (Creswell, 2007) and in-depth interviewing is an especially “reflective process, in which the researcher is the key data collection instrument” (Brinkman, 2013, p. 31). To be successful, I had to set aside my beliefs regarding permitted and unpermitted collaboration and be a truly receptive listener (Moustakas, 1994). As part of my effort to do so, I drafted the following position statement, which guided my work:

**Position statement.** This study grew from a deep interest I have in academic integrity in higher education. I entered the UT Austin Program in Higher Education Leadership with the intention of studying cheating and the role of higher education environments in the development of students’ ethical values. While not explicit in my master’s capstone paper (McNabb & Olmstead, 2009), Kohlberg’s moral development theory framed my concept of academic integrity. Moving beyond this conceptualization has been an important part of my academic growth and the development of this research project. To be successful with this research, I’ll have to set aside what I think I know the answers to the research questions, and I’ll need to be cautious not to bring bias to the study. Otherwise, my expectations, beliefs, and assumptions could negatively affect the accuracy of my data analysis. By identifying them now, I will be more self-aware and better able to set aside my knowledge and beliefs during the research process (Creswell, 2007). This “bracketing” of a researcher’s preconceptions are vital to successful phenomenology (Creswell, 2007, p. 59; Moustakas, 1994, p. 85). It is prerequisite to knowledge and insight, because it gives us “an original vantage point, a clearing of mind” (Moustakas, 1994, p. 86). Its goal is for the researcher to approach the study with “no position whatsoever” (p. 87).

## **DATA ANALYSIS**

The goal of phenomenological research is discover the common meanings within individuals' varied experiences (Creswell, 2007; Moustakas, 1994). We all have different perceptions, and qualitative researchers expect and embrace these multiple views (Willis, 2007). Qualitative researchers are less concerned with facts and more concerned with accurately describing the participants' experiences (Willis, 2007). This is the aim of the data analysis process for qualitative research, and in particular phenomenology (Creswell, 2007; Seidman, 2013). As with data collection, the researcher is the primary research tool during the data analysis phase of the study (Seidman, 2013). The process used for the study relied primarily on coding and theming techniques, and included member checking and analytic memos. The data analysis began with asking participants for feedback on the interview transcripts.

**Member checks.** I sent the transcripts to the students by email and included a request to the student to review for accuracy and completeness, and I asked them to respond with corrections and/or additions. A few of the students provided additional information, most concurred with the transcripts I provided, and a few did not respond. Asking each participant to confirm the credibility of the transcript of his or her interview and/or its interpretation is called "member checking" (Creswell & Miller, 2000). It allows each participant to validate his or her words, or to even add to them (Creswell & Miller, 2000; Poland, 2001). "The clarification of intended meaning may be as important as (or more important than) the establishment of the accuracy of transcripts as privileged texts" (Poland, 2001, p. 643).

**Codes and themes.** Qualitative researchers systematically search for meaning in their data by sorting and naming the results with phrases representing the “summative, salient, essence-capturing, and/or evocative attribute” of the data (Saldaña, 2013, p. 3). These types of codes were assigned to all the research data (Saldaña, 2013), including the interview transcripts, field notes, and responses from member checks. There are many types of codes, and I selected in vivo, values, and pattern coding as the starting points for my sorting. My initial codes, based on my review of the literature, are provided in Appendix M.

The information I gathered on the participants’ experiences with the phenomenon were contained in the pre-interview questionnaire, interview transcripts, member checks, and field notes. I coded all of them, as together they made up the research data (Poland, 2001, p. 644). Coding allowed me to break the data apart, resort it, and find themes within it to discover its deeper meaning (Saldaña, 2013). I used Computer Assisted/Aided Qualitative Data Analysis Software (CAQDAS) to support the coding and theming of the data collected (Dedoose, 2014). Specifically, I used Dedoose to “organize and manage data,” but “not to analyze or interpret it” (Maxwell, 2005, p. 97).

I began with in vivo coding, which uses the participants’ words verbatim (Saldaña, 2013). It is particularly appropriate when the goal is to stay true to the participants’ descriptions (Saldaña, 2013). It’s particularly suitable to studies regarding K-16 experiences where “the child and adolescent voices are often marginalized,” and “coding with the actual words enhances and deepens adults understanding of their cultures” (p. 91). Then, I used use values coding, which sorts data into categories based

on participants' values, attitudes, beliefs, which "manifest themselves in thought, feeling, and actions" (p. 111). Finally, I used pattern coding to begin to identify emergent themes in the data by developing a coding schema (Saldaña, 2013). I repeated the coding more than once and, each time, I updated my codes to reflect what I'd found.

When I completed the planned coding process, I revisited the students' interview transcripts and identified each stories they told about the collaboration on homework. I added these designations to my coding as well; Appendix N has the final codes I used for the study. I created a written description of each collaborative experience with out-of-class assignments as the student expressed it. Then, I looked for themes within and among the stories. Themes are the eventual outcome of the researcher's reflections on the codes developed, and function as a way of categorizing data into repeating ideas (Saldaña, 2013). When the researcher has developed logical coding schema, he or she then connects the coded data by identifying the relationships among the elements of the text (van Manen, 1990). The goal of this process is to narrow the results to a few overarching themes (Saldaña, 2013). "Phenomenological themes may be understood as structures of experience. So when we analyze a phenomenon, we are trying to determine what the themes are, the experiential structures that make up that experience" (Maxwell, 2005, p. 96).

**Analytic memos.** I used analytical memos throughout the data analysis process and, like field notes, found them to be helpful. Analytic memos describe the coding categories, and help the researcher to discern the meaning and categorization of data that does not fit into an existing code or cluster (Seidman, 2013). "Memos are primarily

conceptual in intent. They don't just report data; they tie together different pieces of data into a recognizable cluster, often to show that those data are instances of a general concept" (Miles & Huberman, 1994, p. 72).

## **VALIDITY**

Several of the techniques I used that are embedded in phenomenological interviewing can enhance a study's trustworthiness. For example, the use of multiple sources of data "reduce the risk of chance associations and of systematic biases due to a specific method and allows a better assessment of the generality of the explanations" (Maxwell, 2005, p. 94). Having multiple participants can support a study's claims of validity, due to the ability to "connect their experiences and check the comments of one participant against those of others" (Seidman, 2013). Additional support for validity can be gained through multiple interviews of each participant, which can demonstrate the internal consistency of interview results (Seidman, 2013). That said, it is also important to remember that qualitative research is intended to facilitate contextual understanding, rather than truth (van Manen, 1990):

The goal of the process is to understand how our participants understand and make meaning of their experience. If the interview structure works to allow them to make sense to themselves as well as to the interviewer, then it has gone a long way toward validity. (Seidman, 2013, p. 27)

Finally, the written record of a successful qualitative study should both resonate with its participants and provide non-participants with an accurate picture of the participants' experiences (Creswell, 2007). I believe this paper can be described that way. Accuracy of

the report and interpretation of the phenomenon is the goal of validation methods used for qualitative research (Creswell, 2007), and I have worked to do that here.

## **SUMMARY**

This chapter presented my research methods, and the decisions I made and processes I used for my study. I designed this research based on the what we know about collaboration, academic integrity, and the intersection of the two in the form of unpermitted collaboration on homework assignments, as well as what we know about meaningful qualitative research. There was a need for this study. Significant numbers of students are involved in this new form of cheating, and there are contradictions between the way in which academia understands and addresses academic dishonesty and the way in which some students describe their reasons for working together on homework assignments when it is forbidden. In the remaining chapters, I will share what I learned using the methods described here, starting with a description of my study participants.



## **Chapter 4: Sample Description and Overview of Student Stories**

The previous chapter detailed the methodology used for this investigation. In it, I explained the study's design, including the participant selection and data collection and analysis procedures. This chapter describes the study's participants. It includes demographic and academic data for each student, a summary of the students' engagement, and student profiles. Seidman (2013) says that "what others can learn from reading a profile of a participant is as diverse as the participants we interview, the profiles we craft and organize, and the readers who read them" (p. 122), and that is my hope in providing them here. This supports my goal as a phenomenological researcher "to 'borrow' other people's experiences and their reflections on their experiences in order to better be able to come to understanding of the deeper meaning or significance of an aspect of human experience" (van Manen, 1990, p. 62). This chapter also contains an overview of the stories the students told about their experiences with working with classmates on out of class assignments, including information on the types of collaboration and assignments in which the students were engaged. The purpose of this chapter is to provide a context, along with the literature review in Chapter 2, for the students' experiences that are shared and examined in the remaining chapters.

To assure participating students' anonymity, I have used student-selected pseudonyms, some of which I modified for clarity or privacy. To further assure anonymity, I have affiliated the students with fields of study, rather than majors, and have generalized entry and expected graduation terms. I also used the university's, rather than a student-defined, terminology when describing the students' ethnicities. In addition, for

students who are immigrants or the children of immigrants, I've described the students' parents' homelands as regions rather than countries of origin. Finally, I have generalized the information regarding students' academic and non-academic campus engagement.

#### **QUALIFICATIONS FOR PARTICIPATION**

This study used purposeful sampling, specifically criterion, maximum variation, and chain sampling. Criterion sampling was used to create boundaries around the research, primarily a focus on traditional undergraduate students. Sampling for maximum variation led to diversity within the participants, in both academic pursuits and demographics. Chain sampling caused similarity in interests amongst study participants that may have influenced their engagement with the phenomenon being studied.

Criterion sampling requires that participants meet specific qualifications, the most crucial being experience with the phenomenon being studied (Creswell, 2007). Participants in this study had to have worked collaboratively on homework assignments with classmates. In addition, to narrow the focus to the experiences of traditional undergraduates, participants had to be between 18 and 23 years old and enrolled full time at the institution at which the study was performed. To assure that their experiences were reflective of the school's culture, they had to have completed at least two long semesters at the institution. Each of the study's participants was determined to have met the requirements prior to any interviews through responses to the online pre-interview questionnaire. Later, during the interviews, each participant described at least one experience with collaborative learning with classmates outside of class.

## **DESCRIPTION OF STUDENT PARTICIPANTS**

My goal was maximum variation in sampling, so I was seeking a broadly representative group of students. I was interested in representatives of various fields, so I could learn about experiences across the curriculum. I also wanted the participants to have varied classifications, so they had different experiences with college. And, I wanted both men and women, and for the participant group to be ethnically diverse. I wanted to include between eight and 12 students in the study, and between May 2015 and January 2016 I identified and interviewed 12 students that met the requirements. Because academic integrity research often investigates correlations between campus engagement and cheating (McCabe et al., 2012), I also gathered information on the students' participation in and leadership within campus activities.

**Demographics.** Participants ranged from age 18 to 22 and included seven women, four men, and one additional student who I will not describe using the gender binary selected for this study. Two-thirds of the study participants were Asian or White (four participants each). One was Black/African American and one was Hispanic/Latino. Two students each represented two of the university's ethnicity categories: Hispanic/Latino and White, and Asian and Black/African American. The most significant shared characteristic of the participants was being a first generation American. One or both parents of three-quarters of the students immigrated to the United States, and these eight students' parents came to America from eight countries. In addition, one student immigrated to America, and from the tenth country (including the US) that was represented by participants. Finally, all the students graduated from high school in the

state in which the university was located. See Table 4.1 for demographic data for each participant.

Table 4.1: Study Participants' Demographic Data

<b>Student's Pseudonym</b>	<b>Age</b>	<b>Gender</b>	<b>Ethnicity</b>	<b>First Generation American or Immigrant</b>
Elizabeth Chang	20	Female	Asian	First Generation American
Kevin Chen	22	Male	Asian	First Generation American
Johnna Doe	18	Female	Black/African American	Immigrant
Jesse Fry	20	--	White	--
Devi Garg	21	Male	Asian	First Generation American
Bri Houston	21	Female	White	--
Lucia Lopez	22	Female	Hispanic/Latino	First Generation American
Megan Loren	21	Female	Hispanic/Latino & White	First Generation American
Jessica Schwartz	21	Female	White	--
Michael Smith	20	Male	Asian	First Generation American
John Snow	21	Male	White	--
Tia Washington	21	Female	Asian & Black/African American	First Generation American

Notes. One student requested not to be classified as “male” or “female.” To assure students’ privacy, ethnicity has been reported using the university’s admissions categories.

**Academics.** One-quarter of the study participants were members of the first generation in their family to attend college and, upon graduation, will be the first person in their family to graduate from college. Participants were studying in six broad fields, representing the following university colleges: business, communication, education, engineering, liberal arts, and natural sciences. Five of the 12 students were pursuing more than one degree, major, or minor, and two intended to earn both undergraduate and graduate degrees. Two were honors students.

The students had attended between two and eight semesters at the institution, and the median was seven terms. One student transferred from a community college. The remainder were what are often described as FT FTIC (full-time, first-time-in-college)—they entered the university the first fall semester after high school as full-time students. All the study participants were enrolled full time at the time of the interview, or had been the previous semester (some second interviews occurred during the summer term). Eleven of the 12 students expected to earn a bachelor's degree within the next year. One was a recent graduate who was transitioning to graduate studies. See Table 4.2 for a summary of the academic status of each participant.

Table 4.2: Study Participants' Academic Status

Student's Pseudonym	First Generation College Student	Field(s) of Study	Semesters Enrolled at Institution	Years to Expected Graduation
Elizabeth Chang	--	Business & Liberal Arts	6	1
Kevin Chen	--	Engineering	8	<1
Johnna Doe	First Generation College Student	Natural Sciences	4	1
Jesse Fry	--	Communications	6	1
Devi Garg	--	Engineering	8	<1
Bri Houston	--	Education	6	1
Lucia Lopez	First Generation College Student	Education	8	1
Megan Loren	--	Business	7	1 (+1 Master's)
Jessica Schwartz	--	Education & Liberal Arts	8	0 (+2 Master's)
Michael Smith	--	Engineering & Natural Sciences	2	2
John Snow	--	Business	7	1
Tia Washington	First Generation College Student	Natural Sciences & Liberal Arts	7	1

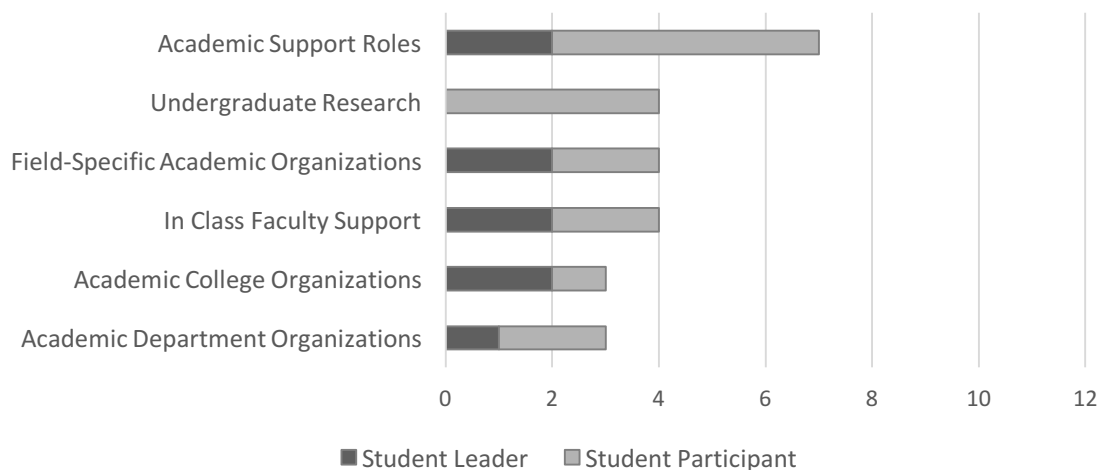
Notes. To assure participating students' privacy, academic college has been reported rather than majors, and general entry dates and progress toward degrees are provided rather than specific semesters and years.

**Engagement.** The study participants were engaged in between one and ten of the 16 organization and activity types listed on the survey. Engagement in four activities was the median for the group. Figures 4.1 and 4.2 detail students' responses to the pre-

interview survey questions regarding participation in academic activities and university organizations.

**Academic activities.** Seven of 12 students had worked in an academic support role on campus, for example, as a paid tutor. One-third had participated in undergraduate research, were active in field-specific academic organizations, and/or served in an in-class support role for a faculty member (for example, as an undergraduate teaching assistant or proctor). One-quarter reported participating in organizations within their college and/or department. See Figure 4.1 for a summary of the students' academic engagement beyond coursework.

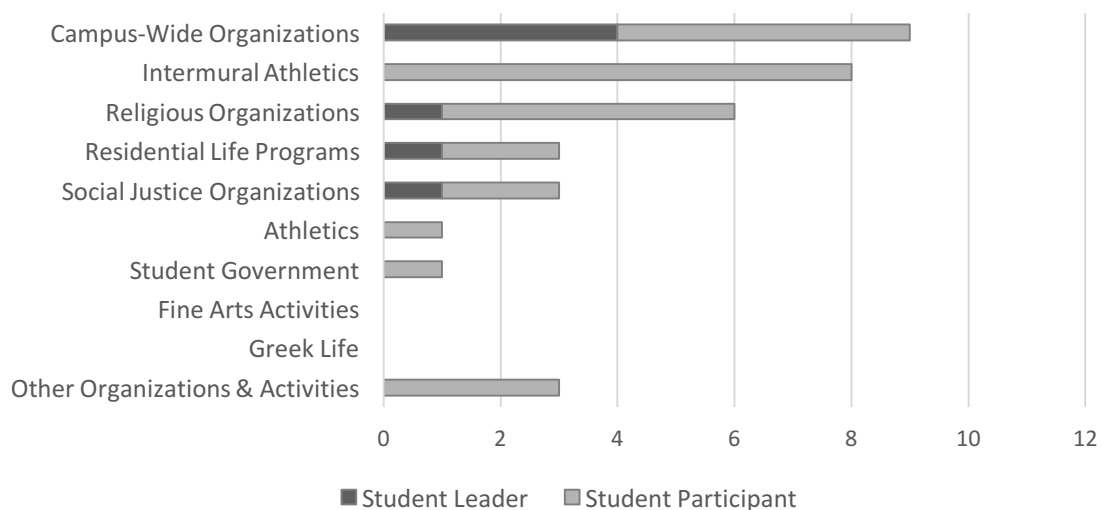
Figure 4.1: Study Participants' Leadership of and Engagement in Academic Activities, in Order of Frequency



**Nonacademic campus engagement.** Most of the students were active in university activities. Within the group of 12 study participants, nine were participated in campus-wide student organizations, eight were engaged in intermural athletics, and six were a part of campus religious organizations. In addition, one-quarter were engaged in

residential life activities, social justice organizations, and/or other activities and organizations that were not specified in the survey. One student was involved in student government and one was involved in the university's athletics program. One-half of the students interviewed had served in leadership roles within these organizations and groups. None had been a part of Greek life, nor were any active in fine arts organizations. See Figure 4.2 for a summary of the students' participation in non-academic activities and organizations.

Figure 4.2: Study Participants' Leadership of and Engagement in Campus Activities, in Order of Frequency



Finally, it is important to note one result of the use of chain sampling, or asking participants to identify other potential participants (Creswell, 2007), on the make-up of the group of study participants. Chain sampling allowed me to use the campus networks of participants to connect with additional students who were experienced with the phenomenon and who were willing to participate. It also created an overrepresentation, in comparison to the overall institution, of students who were engaged in two organizations.



First, several participating students were members of a Christian religious group. These students had become religious or more religious during college, and most of them had experienced a religious conversion. Some of these students described their decision-making regarding cheating as two different experiences, based on two sets of beliefs: one before their engagement in the religious group and one afterward. There were also several students who were active in an organization that provides an intensive personal development opportunity for students who have experienced the loss of a loved one due to cancer. While these experiences—death and loss, and the community formed around it through the student group and its activities—did not seem to have an impact on the students framing or beliefs about academic integrity, it did seem to impact the students’ personal development during college.

### **PARTICIPANT PROFILES**

Phenomenological research requires us to “borrow” the life experiences of others as a part of our meaning making (van Manen, 2014, p. 313). “We gather other people’s experiences because these allow us, in a vicarious sort of way, to become more experienced ourselves” (p. 313). The profiles below are, therefore, provided as context for the experiences—stories, observations, and beliefs—that are shared in the final chapters. I have used the student’s own words as much as possible, to provide some insight into the personality and spirit of each participant.

**Elizabeth Chang.** At our first interview, I turned on the tape recorder and Elizabeth Chang began, without prompting, by answering the first question printed on the paper in front of her, which was “tell me about yourself”:

I'm quite organized, quite meticulous, a bit inflexible, I would say. I'm quite competitive. I would like to say I'm caring but in other ways that, well not the conventional ways that people would think is caring, like the obvious ways.

She went on to talk about her experiences at a competitive high school in a suburb of a large city, where she “felt kind of generic” and about which her mother, with whom she now has a “broken” relationship, said about her friends: “don’t help them, they just want a higher [academic] rank than you.” She said she studied more there than in college.

Elizabeth is the youngest of three daughters of East Asian immigrants. Her mother was one of four children of a military leader in her home country, all of whom attended college. Her father, on the other hand, was one of eight children from a very poor family. He was the first in his family to graduate from both middle and high school, and then went on to earn both a bachelor’s and a master’s degree. Elizabeth described her mother as having a “mental disorder.” She described a close relationship with her father, and most of our conversation about her family was about him.

Elizabeth’s father taught her to be responsible, reliable, and a hard worker. He is and wants her to be humble, and has encouraged her not to take the opportunities she has had for granted. Her father always told her to be respectful to older generations: “He said that older ones, if they really care about you, they’ll let you know their mistakes in life so that you won’t repeat it.” Of course, she added, everyone can decide for themselves whether to listen.

Elizabeth was initially unhappy with the social aspects of college life, as she explained it:

When I went to college, I was kind of excited because, in the media, they hyped up college. They said that it was supposed to be fun, you’ll make a lot of friends. But that was not true my freshman year.

She struggled with the size and diversity of the institution: “How can I create close relationships if there’s so many people from so many backgrounds? I just didn’t know where to start.” But Elizabeth’s father told her that her best friends would come from her time in college, and she eventually found that to be true. She’s forged close relationships with a small group of classmates, many through a Christian fellowship, whom she described as “friends who value me more than I thought I could be valued by people.” Elizabeth’s involvement in her religious community has been an important part of her college experience. In addition, she served in a leadership role in other campus organizations, including within the residence halls. She has also been an academic leader, working in academic support roles both in and outside the classroom. Finally, she played intermural sports.

Elizabeth entered the university in a STEM field, intending to pursue a career in medicine, but discovered it was not her forte: “I came to a truth about myself: I am squeamish toward blood.” She attempted to transfer to the business school but was not admitted, so she is pursuing liberal arts. She also added a minor in a business field on her sister’s recommendation, who said it fit her personality: “very organized, likes to deal with numbers, happy doing the same thing over and over again.” But after two semesters she said: “I thought I would be really good at it. I’m actually okay. I’m like average, maybe even below average.”

Elizabeth describes herself as occasionally distracted in class and hardworking outside of it. She dislikes and procrastinates writing assignments, and calls them her

“kryptonite.” But, “That's OK,” she explains, “I like numbers. I know a lot of people wish they were better with numbers, but you win some, you lose some.” She learns best from professors who provide organized lectures and visual aids and personalization of the content with a story helps her to learn. She’s a prolific note taker, and that helps her to remember what she’s heard in class. Elizabeth said she plans and uses her time well. For example, she blocks time on her calendar for studying and assignments, which she says makes school less stressful: “Because I am so organized, I feel like I always have time to study for things.” She went on to say that the same attribute—always planning—can sometimes lead to more stress. She said she is often “burned out” after Thanksgiving or spring break. Then, she says, she is not as motivated in school. Finally, she likes to stay busy: “I don’t like it when I have free time, or too much free time, just because I’m kind of restless that way.”

The value of higher education, says Elizabeth, is its impact on career opportunities and success. While being initially overwhelmed by the diversity at her university, she values it in her personal and professional development. When she compares her experiences at the university to the experiences of her high school classmates who stayed at home and attended a community college, she feels she is better prepared for work and life. Elizabeth appreciated the opportunity to attend college, and is grateful to her father for making that possible. She said she knew others who “went to college just to do the bare minimum,” but she believes that “this is a great opportunity that I have to really grow and mature, and become more knowledgeable.” That said, Elizabeth shared that her personal goals for her time in college had changed:

I expected when I was a freshman to get good grades, to get into a good grad school, work hard, and hopefully not suffer, and earn enough money to live comfortably with a family—like what my parents strived for. But the trajectory of my life has changed since then. I thought in college I would just focus on school, and not care about other people. Or, if other people got in the way of my grades I would just ignore them. ... I do value good grades and wanting to get a good education, but now what I want to accomplish in college is to build relationships. ... There are a lot of storms and struggles and hardships in people's lives after college, and it's people who get you through those years.

Kevin Chen. Several times during our interview, Kevin Chen bragged about his parents' accomplishments. He told me each of his father's several jobs, for example. He was a proud child of immigrant parents, an only child whose parents came to the U.S. from the same country at different times and met in America. "They met when they were working at a restaurant," he said, "My dad was a delivery driver, and my mom was a waitress." On the other hand, Kevin was humble about his own accomplishments. He claimed he didn't remember his high school rank: "I graduated in the top few percentages of my class. I don't remember exactly." He also described himself as an introvert who preferred to work independently. But, while he wasn't as active in out-of-class activities as some of the other students, he was engaged on campus (in a religious organization and intermural athletics). He was also talkative and reflective about his experiences with and insights into college life.

Kevin grew up in a large suburb outside of a large city. His father has "some sort of business degree," and works in a somewhat technical job at a government agency. He's also a "part-time realtor and part-time landlord." Kevin's mother is retired from her job in wholesale sales. Kevin said: "High school was a good experience for me, had a lot of fun, felt pretty smart." That is where he found his major, engineering:

One thing that shaped me in high school to choose my major of is, my eighth grade [field of study] teacher. At first, I didn't do well in her class, but then maybe halfway through the first semester, it just all started to click and pull together somehow. I found out I really liked it. It was part of the reason that I chose my major.

He also had another purpose in selecting a competitive major at a competitive school:

Another reason was just pride, to be honest, because I felt that [the university] was pretty well known for its [field in engineering] program. It was a hard program. I guess that I was pretty smart in high school, it's just a big part of the reason that I chose [field in engineering] was pride to take on the challenge and conquer it, although it's kind of conquered me.

A third motivator, said Kevin, was a desire to “just earn a degree and then move back home,” where he knew there were job opportunities for a student with the degree he chose. He seemed confident in that path: “I think probably the biggest benefit is just the doors that [the degree] opens. Just having that degree can get you a job in a lot of places, even if it's not related to your field.” Now, he has different plans: “I changed over college. I want to stay in [in the city where the university is located] now.” In addition, while he has done well, Kevin isn't passionate about his field of study and future career:

I look around and some of these other [students in them major],” they're really ambitious about what they do. They really love it. They're doing all these [academic and career activities]. I don't have that kind of drive. ... For me, personally, I don't have that much of an interest in [major field]. I do like it, but at the same time I'm not going to invest my whole life into this one career field.

About his major coursework, Kevin said:

There are certain aspects of [the field] that I like and that I enjoy, and some aspects that I don't. It's much easier for me to focus on those aspects that I do like. The ones that I don't like because I don't really focus on them all that much, they tend to go on the decline, which is unfortunate.

In general, he said, reflecting on school and studying:

I can't say I'm the most diligent student. ... Like I said, if I had that interest, it's really easy for me to pursue it more, learn more about it, and learn everything about it. On the other side, if I have no interest in it or if I find that I'm not that great at it, it's really hard for me to pursue it. ... Part of it is just laziness and not wanting to do any extra work. I've gotten by so far.

In summary, he went on to say: “Definitely, my work has declined over college in general.”

Kevin shared that job stability and economic security were important priorities for his family, and that those values had guided him when he first left home for college:

The most important value to my family, at least my immediate family, was living securely and living comfortably: having a rainy day fund, so you're sure that everything is safe; being really frugal, because you don't want to spend too much and not have enough money when something does happen.

He has now adjusted those beliefs, and has his own priorities: “I think over time, over college, coming on four and a half years now, those values have impacted me less and less.” Kevin’s experiences in college have been transformative and that, more than anything, has sent him on a path that is different from his parents’. As he explained it: “Coming into college I just wanted to please my parents, just wanted to graduate, go home, get a good paying job which is easy in [his hometown with the degree he is earning], and support them financially, live my own life.” But now, says Kevin:

I became a Christian two years ago, I come from a Buddhist background. That turned my world around 180 degrees, especially with my relationship with my parents. My worldview is completely different now. I say that [my parents] are Buddhists, but they are only, marginally. They go to the temple occasionally, they pray with incense, but they don't really know the meaning behind any of it. They are culturally or traditionally Buddhists. Since I became Christian, I saw the world in a different light. There really is more to life, than just earning a paycheck.

Because of this, Kevin’s priorities and values have changed significantly during his time at the university. “Coming into college, my personal values were success, pleasure and

comfort-driven,” he said, “Honestly, I didn't make that great of decisions. ... I wasted my life.” Now, his goal for his last semester is, “ministering to the students here, because that's something that has become a vital part of my life—sharing my faith, spreading it with people, classmates, even random students on campus.” As he explained it:

I think as a Christian that's what I was called to do, not just, as I said, earn a paycheck, not just to please my parents. My goals overall have shifted significantly from just things of this world, just pleasing my parents, earning money, having a safe secure life into I guess the same purpose.

**Johnna Doe.** An unsettled childhood framed many of Johnna Doe’s responses to my questions. She came to America as a teenager: “I am the youngest of two. I have an older sister and my mom, because I don't really have a dad in the picture. Then my aunt who brought me up for most of my life and her son.” When I asked Johnna about her experiences in high school, she explained that she did not attend one:

I actually went to high school in Africa. Technically, I didn't even go to high school. But I had the end of elementary school and middle school in Africa, and then I came here to community college, and then transferred into [the institution].

She went on to talk about her life and her school before she came to the U.S.:

I would say my experience in [in Central Africa] did shape me a lot. There were a lot of things that happened, like strikes and stuff like that. Also, just being with the students all the time, because it was a boarding school. There was always that interaction, getting to learn about other people's lives. Sometimes we would have cholera outbreaks, and stuff like that. That really just made me aware and more appreciative of the resources I have now.

Johnna said she had brought her family’s values—prioritizes education and a strong work ethic—with her to college. She told me, “I think my family very much values education and high work ethic. I think just giving your best at it. They also value security a lot.”

She went on to reflect on this and provided an example:



I don't know if I've necessarily taken on those values for myself. But I do know that one value that I did take was work ethic. I do try my best. Even though I fail so many times, I still try. I guess whenever it comes to classes in college, and I'm not doing so well, I still try to give it my all either way.

Regarding her strengths as a student, she said, "I guess honestly I'm still figuring out how to learn better. I think I do learn better with examples and visuals. I guess my strength is explaining it to others in the simplest form possible." She laughed and went on to say, "I, myself, need it to be explained to me in the most simplest form." A natural sciences' major, Johnna said that her schoolwork wasn't always easy: "A lot of times ... I don't do well in my classes. I think I would have definitely dropped out by now if I was [just] going for grades, I would have gone to some other school" She said she feels she's more successful when she works with other students: "I like the experience of working and also working with people. Those are the things that I value." In addition, Johnna said that her grades are not her sole focus. Instead, when I asked about her priorities in college she said:

I highly value relationships. I like to build a lot of those, and I also value working hard too. I think a lot of times when I'm in a bind between preparing for an exam earlier on, rather than attending to a friend in need, I would [attend to a friend].

Johnna's interest in relationships was clear in her many activities at the university. She had done undergraduate research and had been in academic support roles including working with a faculty member, providing classroom support. She has been involved in both athletics and intermural athletics, and also residence life. In addition, she was very active in a religious organization. When I asked her about how she spent her out-of-class time, she said, "Study and eat, and a lot of church activities as well. Like prayers, Bible

studies, stuff like that. Occasionally I like to sing and then go out, and I work too.” (She has a part-time job at one of the on-campus research centers, fulfilling researcher’s requests for archival materials and then putting them back away when they are done.) She added that her involvement in a “Christian ministry group” was new for her, and that she was not as religious before she came to college. In summary, regarding her experiences in college, Johnna said, “I think my friends and activities, for sure, have been the most impactful on me.”

Although she was a senior when I interviewed her, Johnna did not seem to have any concrete plans after graduation. “I’m hoping to get a job,” she said when I asked, “Probably the most basic thing. ... I think getting a job will help me provide for myself, and hopefully someday a family. That’s what I’m hoping to get out of this.” Again, she could not tell me any specifics, but was hopeful: “If I do find something that, really, I’m passionate about, then I hope to share that with other people and hopefully get other people interested too.” This aligned with her beliefs about the value of education, which were influenced by her life before she came to America: “The great benefit to [education] it to be able to provide for those closest to you. ... Also, to be able to protect yourself. A lot of times those who are not in higher education don’t necessarily have all the information necessary to better their lives.”

**Jesse Fry.** “Sorry, my professor just emailed me so let me take a look at that,” is the first thing on the audio recording of my first interview with Jesse and it foretold, to some degree, the interviews to come. Jesse Fry was talkative, opinionated, and reflective.

Jesse was also curious. We stayed after the second interview for at least 30 minutes while Jesse asked me questions about my study and what I expected to learn.

Jesse graduated from high school in what Jessie described as “a very conservative town,” adding it was a, “church, church, bible, gun, sword, church, church type of place.”

Jesse said:

It was a little repressive, but at the same time I had a lot of good friends and people near me that I could count on. Even though there were a lot of really difficult times growing up in an environment like that, I think it was so good for me because I was able to grow a tough skin while still having emotional support. I feel a little bit lucky about that.

When I asked Jesse about the preparation for college available at the public high school, Jesse said, “As far as how high school prepared me for college, I don’t feel like it did. ...

I mean not like, ‘I came here and I really have no idea what is going on.’” Instead, “It was more like, in high school, they tell you what college will be like, and every single word that comes out of their mouth is a lie.” Jesse was surprised by the freedoms in college, that no one paid attention to whether you were going to class, for example.

Jesse went on to say that education was “very important with my family,” and that: “It was never a question whether I was going to college. That was always going to happen.” Jessie went on to say that even going to a community college would have been considered failure. In addition, when asked my question about describing yourself as a student, Jesse said, “I’m more of a hands-on, visual person, rather than reading. I have to do something to get it,” and “As a student, I do think I can be a bit of an overachiever. I’m also ADHD, so I do have focusing problems and impulse control issues.” Then Jesse

went on to say, “I feel like there’s a part of me that is very studious and very scared of failing. I sometimes work a lot harder and worry a lot more than I should,” but that:

When I’m interested in something I’m not afraid to say I’m a really good student. That is a strength, that I have a passion for what I do and want to learn. ... My weakness is, if I don’t care, I just don’t care. No matter how hard I try, I cannot do well.

Regarding the decision to study a creative field within communications, Jesse said friends, rather than family or high school experiences, influenced Jesse’s choice:

My friends shaped who I am, even more than my parents, I think. We were always the nerdy kids that were into teen comic books, video games, and movies. I think that’s what really got me into my major. I want to give [other people] the same escape. I want to create worlds for people and tell stories.

Jesse also described Jessie’s parents for fitness and how that had become symbolic of their values to Jesse:

My family also has a think about fitness, health. Life, to a lot of people, is just survival of the fittest. You have to be smart. You have to be good looking. You have to be healthy. You have to be all these things. ... I have rebelled against that since going to college. I have chopped off my hair and died it different colors. I still work out on my own, because I do like staying healthy. ... I do like the feeling of treating my body right. But I don’t do it to the extent that my family pushed on me, having to practically starve yourself and workout insane amounts. I rebelled against that must-be-perfect standard.

This had just added to the tensions between Jesse and Jesse’s parents. As Jesse explained in our first interview:

I think because of my friend, I was able to realize that I don’t fit into the gender binary. I don’t feel like a man or a woman. ... For a long time I struggled with that. It was until my best friend in the work and my brother were like, “have you ever heard of being gender non-binary?” I was like, “No, what the heck is that?” I found out and it made me feel a lot better about myself. I was like “Okay, so I’m not broken. It’s a legitimate thing.

At our second interview, Jesse began by telling me about being angry after a visit home for the weekend:

They were just relentless in their constant misgendering and making very inappropriate homophobic and transphobic jokes. It was very mentally exhausting. But the entire time, I had these friends that I met through my classes, and my dorm, they were just like, “We’ll be here when you get back, and we’ll all watch movies together.” They were very supportive. ... They would tell me that they loved me, that they cared about me. They used my proper pronoun and my proper name.

So, Jesse was glad to be back on campus, with a caring community:

The best experience, I think, of all of college, is getting to live with my friends, getting to live with people that truly understand me and appreciate me, and that want to support me. I’ve grown to really appreciate that.

Jesse also enjoys and feels supported academically by her classmates, explaining to me that, “All my classmates and I are really friendly with each other, and we’ll help each other out, and work on things together.” In addition, Jesse’s participation in out-of-class academic activities through a field-specific organization was particularly important:

I was part of something. I would work with them and I’d get skills. It was really cool. Now it’s four years later and I am [title] within the organization. I went from volunteer to [position], to [position], to [position], which I’m very proud of.

Jesse said that the skills gained there had led to a summer internship that Jesse was excited about. The same good feelings describe Jesse’s faculty members: “As a learning community, the faculty are great. ... Professors in [Jesse’s academic department] really do care about their students and want to help them succeed.” All of these strong relationships have made college a very positive experience for Jesse, who said, “College is great,” and went on to explain that:

One of the things that I truly treasure is that with school and career and friends all together, I feel like for the first time I can say I'm happy. I still have depression and anxiety, but I have really good moments and really good days, and I think that's all you can really ask for.

**Devi Garg.** Quiet and unassuming, Devi Garg was succinct but thoughtful in his answers throughout our interviews. He still had quite a bit to say, as Devi's time in college had been transformational, in part because he found his place in a church community. Here's his reflection on that experience:

In terms of life events that shaped me, the biggest thing was coming to church here at [the university]. Before coming to college, I went to church, but I wasn't super religious or anything. After coming to college I started taking my faith more seriously. College was a good time for me to investigate what I really believed in. That shaped how I am today.

Devi is the oldest of two children of South Asian descent. He grew up in a small town, where "education wasn't really big in high school." According to Devi, that meant it was "easy for me to get into [the university]" due to his class rank, but "when I got to [the university], I realized that everyone's pretty smart here."

When I asked him how he would describe himself as a student, Devi said: I'm not like a super great student," and "I think the best way I learn is by doing things. When it comes to learning the concepts, it's more about working practice problems and things like that. ... Working it out." He said his strength is putting "significantly more effort" into school work he enjoys and "I guess that comes with the weakness of, if I don't enjoy something, if I think it's not valuable, I usually put in the bare minimum of effort. This usually hurts me in the subjects I don't like." He said he believes that, "The best way to learn is with someone around your level, and you both learn the materials together, one

person teaching the other or collaborating.” In addition, he said, “when it comes to faculty members, a good professor is someone who ... gives us lots of things to practice, solutions to study, not lectures.” He said “there’s not too much a story behind” his major choice. He is pursuing engineering for the employment opportunities, rather than a passion for the field:

What drew me to my major? For me, I’m more of a practical person than I am a dreamer type. So, I picked [area of] engineering because I thought it would be the easiest way to get a good paying job.

Work and career also framed his beliefs regarding the value of education: “I think the greatest benefit of higher education is probably the different connections that you make.” But he went on to say that personal relationships had become more important to him. Devi was active in several organizations in college, including university-clubs—the most important of which was a religious group—and also intermural athletics. He struggled to find the words to explain benefitted from those experiences, saying: “Learning ... in a sense of like learning to come out of my shell, or learning to interact with people,” and “I guess,” college helped with, “maturing, more than just focusing on specific things you can learning [in college], but rather how to grow as a person.” He said that, in college, he had learned “how to be more caring.”

These statements do not reflect the same values he said he brought with him, from his family, when he came to college. In fact, he said, “I wouldn’t say my family has a core set of values they adhere to, just working hard and being someone that’s reliable.” Then he went on to say that he did work hard and he was reliable in college:

I guess my personal values are things like honesty, and working hard, and kind of being a reliable person. With regards to the academic side of college, I'm academically honest, I guess. I work hard in terms of trying to graduate. I work hard in terms of getting a good job.

He also said, "my other personal values are, like, not getting into the party life, or not hanging around with the wrong crowd." Instead, he went on to say, he had "turned away from those things because of my own personal values," and that "those are the types of things I've done in college."

**Bri Houston.** The best word to describe Bri Houston is "enthusiastic." The daughter of a high school computer science teacher, Bri was excited about her future, and had lots of stories to tell about her experiences learning her craft. Bri was close to graduation and was thoroughly enjoying her professional development sequence of courses, including her experiences in local classrooms. Bri was particularly attached to her classmates in the education program, who she described as being very engaged and collaborative:

For my cohort, we're all really close, because we see each other four days a week for eight hours a day. We help each other with assignments. We have GroupMe [a mobile chat application] where we all talk about, like, "This is coming up, and "What exactly is due for this project?" We do Google Docs for things, so we can all be in there, putting in information.

She explained that her cohort has 19 students who will graduate together. "You get real close, She is particularly close to "two or three friends who I've known since my sophomore year who are in education." She said they call themselves, "the three amigos," and said one is studying general education, one bilingual education, and one special education. "We help each other out," she said, each providing expertise based on



their field of study. She also talked about the cohort's facilitator, who she called their "coordinator." Bri said, "She's really helpful. She's like, 'Oh, you need a lesson plan? Let's go to my bountiful file folder of lesson plans.'" She said their facilitator made them home-cooked meals and that called their faculty members by their first names. She said:

I love it. One class, I'm like, "I didn't understand this," and [the instructor], she's like, "Did anyone understand it?" When we all said "no," she's like "I'll reteach it next class. I must not have done it correctly. You'll get it."

"It's real nice," she added, "because they make sure you get everything. They want you to succeed."

Originally, Bri wasn't sure if she wanted to study education. She applied to several different schools and selected a different major at each, based on her campus visits and research. She chose education for the institution when she applied, and decided to stick with it when she entered. She pointed out their high ranking, proudly, when talking about her decision. She had already decided to try to stay at the university to pursue a master's degree and had just begun to study for the GRE test. She's hoping to pursue the university's STEM education program in graduate school. She's pushed herself during her undergraduate program, and says she'll do the same in graduate school:

I expected to have the normal college experience in the movies, but college is nothing like the movies. Nothing at all. It's a whole lot of Netflix, a whole lot of sleeping, and a whole lot of reading. It's nothing like the movies. I know some of my friends have had the normal college experience, but I don't know. I really just want to get done, learn as much as I can, and then get a job, have a family one day. They're not on that path.

That said, she wasn't nearly as confident or as successful when she started her education: "I wanted to make friends, and do as well as I could my first semester, but it

didn't happen." It was, "kind of a rough first semester," she said. So, she's been making up for it, "Gotta work on getting my GPA up—I want to do a master's." Still, she calls herself an average student: "I'm not super, I don't have the brains like everybody else does. I work real hard to get my grades." She went on to say that, "Learning is very much a process for me," and that, "My strength is probably math. And writing is very much a weakness for me, which is rough in collage, because it's all writing."

When I asked Bri about her family values, she said "My parents are big on honesty," and also independence: "They just let me do what I wanted to do in high school. They trusted I wouldn't do drugs, alcohol, stay out late." And, for the most part, she continues to share those values:

I guess with honesty, I'm really big with that. I tell people how I feel. I'll tell them: 'You know, what you're doing kind of upsets these people.' ... And then, I guess, with independence, when I work with my kids [in the classroom], they've got it, they know how to do things. You've just got to give them time. They can get it eventually.

Bri attended a small high school in a small town. She said, "Before college, I used to be kind of shy. I wasn't sure I wanted to do teaching, because teaching you have to be in front of people, and I was like 'I don't know if I can handle that.'" But after her experiences in college, Bri says, "I don't mind talking to people. I'll volunteer now, I'm more of a go-getter now."

**Lucia Lopez.** Despite being the valedictorian of her high school class, Lucia Lopez told me that, "At first I didn't even know if I could finish a four-year degree. But, being at the university, and having role models, I can see myself doing that now." Lucia's self-doubt, hard work (she said she rarely missed a study session organized by a faculty

member or teaching assistant), academic success, and resulting confidence permeated our conversation. In fact, when I interviewed her, Lucia had just been admitted to a second major, and had decided to stay at the university additional semesters to complete it. Her second major is in a science field, one that she said she has loved since middle school, but she was afraid to attempt it when she first came to college.

Lucia's parents came to America as migrant farm workers from a Spanish-speaking country almost 30 years ago. Lucia was born in a border town and traveled with her parents. "I don't remember much because I was so young. We traveled back and forth from [city one] to [city two]. Eventually, her parents finally moved the family to [city two], and Lucia lived there until she came to the university. Lucia is the middle of three children. Her older brother attended the community college in the town where they grew up. So, Lucia was the first to leave home. Her sister is in elementary school and Lucia hopes to support her on a path to college: "I already know how to navigate college. I think I will help her a lot. I'll be a resource to her, as well as my cousins, and other people in my family." She calls herself a "life-long learner," and told me: "I love learning." Lucia said her family also values education, and her parents encouraged her in school: "Seeing how hard they worked, the sacrifices they've made, and the struggles, the financial difficulties they faced, that motivated me to do well in school and to take advantage of as many opportunities as possible." But, her family could not help her to pay for her education, so she was grateful for the scholarship her success in high school earned her. "I'm very motivated to do well in school. I appreciate the opportunity to attain a higher education," she said, adding, "I feel I have this great opportunity that [my

parents] didn't have," and, "I'm one of the first people in my family to really have this opportunity." And Lucia is already thinking past this opportunity, saying, "It's even more than just getting a degree. It's me having a career." She will be one of the first in her family to achieve that too. And, she majored in education, a field in which she thought Spanish fluency would be a benefit, but developing skills in one of the requirements of the degree—speaking in front of groups—has been challenging:

I always struggled with it. But, in most of my classes they made us talk. We had to participate. Sometimes we were graded on how well we could participate. So that really helped me speak up and get out of my comfort zone.

Lucia has been active in several ways during her time at the university. She has been a part of university-wide organizations, played intermural sports, and played a role in providing academic support in a classroom. "I've been really involved in several organizations," she said:

They've helped me. Before, at the beginning, when I got to the university, I was very shy to join any organization. It was just really difficult not knowing a lot of people. It was just very difficult. I think that helped me to be able to get more comfortable around people.

Now, she's gained enough confidence that she's serving as an officer in one of the organizations that is most important to her.

**Megan Loren.** "College is a time where you grow the most," said Megan Loren, "You don't know which way you're going to grow. Your parents want you to grow straight up. They want you to be like them. But branching out is okay. It actually helps you to define who you are." And Megan was very clear about who she is and what had shaped her.

Loren's mother came to America to escape a war in Central America. Her grandparents had settled there when escaping a war in the Middle East. As she explained it: "We have a history of fleeing wars." About her Mother, she shared: "She grew up with bombs going off while she's at school, and her classmate's parents getting kidnapped for ransom, and things like that." Her Mother came to America when she turned 18 and met Loren's father in college. He comes from a region of American with a strong culture, which Loren was as proud of as her mother's. She chose the university because of its diversity, which she values. As she explained, proudly, "Everybody in my Mom's family married somebody from a different culture. ... You grew up learning that it doesn't matter where somebody else is from. We're all the same."

Loren grew up in a suburb of the town in which the university is located. She attended a large high school where she was very active. She was elected student council president during her senior year:

I was in charge of the school, essentially. I learned a lot about myself, and a lot about my peers, and a lot about how to create something that will make everybody happy without making certain subsets upset. Not everybody's going to be 100% happy with all the decisions you make, but if the majority are, then you've done a good job.

She has been equally active in college. She loved her experience in the study abroad program. She also played intermural sports. In addition, she served in university-wide and field-specific clubs, including in leadership positions. She has also been very engaged in academics. She has had jobs supporting other students' learning, including working as classroom support for a faculty member. In addition, she was admitted to a five-year master's program with very competitive admission requirements and

challenging classes. Her most meaningful commitment during college, she told me, has been her involvement in an organization that raises money for cancer awareness. The club is made up of students who have had a family member who has struggled with cancer (her father had it and survived). This continued her involvement in supporting individuals and family members with severe medical issues which, was a path she began on with her Mother when she was young.

When Megan was in high school, her younger sister was diagnosed with a rare, genetic heart condition. Megan found out that she had it too. But, unlike her sister, she had no symptoms. This made them two of only a handful of people in the U.S. with it. Her family was told they could die from physical activity, and she described giving up the sports she loved and living in fear of death: “It was so frightening in terms of health and safety, and it was upsetting to me that I could never play sports again. I could never run with my friends, or do anything like that.” Later, her family found other doctors with more expertise, who allowed her to return to some physical activity, which she appreciated. This allowed her family to return to some semblance of normality. As she said: “Seeing the impact on my Mom, especially, was really difficult. She has a hard time sleeping for like a year. She was worried for us all the time. But we’ve got it under control now.” Because of this experience, her family became very active in an organization that raises money to bring people to the U.S. for heart surgery. They were particularly engaged with families from her Mother’s home country, serving as translators with doctors and hosting their patients’ families in their home.

Loren's family values also included honesty, which is a value she brought with her to college: "Honesty has impacted my college career. It's really impacted all my efforts of my life. Lying is dirty. It's not a good thing to do. I would much rather make a worse grade being honest with myself than making a better grade cheating or being dishonest with myself or others." She has been happy to find friends and classmates that share this value. She says, of them: "I have a certain group of students that I work with on major assignments. We try to get the same classes together. And, we're very good friends." Regarding their study processes, she said, "I'm definitely a collaborative student. I learn best when I talk to other people about things." The group supported one another in other ways too. For example, she said she'd recently considered dropping out of the master's program and just earning a bachelor's degree and her friends talked her out of it: "They literally told me, 'No. You've got to finish. We're not going to graduate without you.' Having that support system from my classmates is what really keeps me going." After that, she recommitted to her plan to earn both degrees: "We pull each other together," she said about her friends, "We continue on. We're not going to graduate without each other. It's really great to have that support system."

Loren also had very positive experiences with faculty members, saying, "My professors are so good. They really care about your improvement," and gave an example of support and encouragement from a faculty member when she failed a test the week a friend from high school took her own life: "He was like, 'I'm really impressed with how you're doing with everything that's going on. Just make sure you learn this stuff. Come to office hours and I'll help you.'" As the semester progressed, she said, "He would write

on the back of my exams: ‘Great job. I see a lot of improvement.’” This was one of several examples she provided of getting the help and encouragement she needed from faculty members: “Having faculty members who are willing to help is probably one of the best things that you can do to learn.”

Megan said she never doubted she would earn a college degree, and she was determined it would set her on the right path to a successful career. “My Mom has engraved it into my head that having an education is what is going to make the difference in my life. She grew up in a civil war. A lot of people around her didn’t have more than a high school education. She didn’t really care what I studied, as long as I got my degree” said Megan. “Thankfully,” she added, “both me and my sister chose degrees that are very good in today’s industries—education just opens up so many opportunities.”

**Jessica Schwartz.** “I just graduated! That’s very exciting!” said Jessica Schwartz at the start of our first interview. It was one week after her last semester as an undergraduate, so Jessica was in the mood to be reflective. One of her insights she was eager to share was why she had offered to be a part of my study. Due to her experiences at the university, Jessica had decided to pursue a career in higher education student affairs, and had been admitted to a graduate program to do so. She thought seeing what I was doing, as a graduate student, would be interesting. So, while I was interviewing her, she was doing the same—asking me lots of questions about my research and the research process.



Jessica had attended a small, private experiential high school. She got to design her own assignments, and traveled for her studies as well. But she did not believe that had prepared her for college:

To be honest, the education part of the school was not fantastic. It was a relatively new school, so at that point they were still very much “teaching to the test”—to the AP test, to the SAT test—rather than trying to really get students to learn.

But, she said, “Education is very important to my family. There is no question in my family if you’re going to college or not. You’re going to college.” She also said that loyalty and responsibility were important to her family, and said all three values had influenced her during her time at the university.

Jessica had come the university to be a part of a prestigious “build your own major” honors program, in which she had decided to focus on education. She loved being a part of the program: “Being around a group of people that are really motivated to learn is very helpful in terms of how I’ve done at the university.” About her classmates, she said, “We spent many night up late, trying to help each other and giving each other moral support. Part of my success was due to them—just being in that environment where we’re all trying to help each other.” She also bonded with her thesis advisor, who she said was, “invested in my work.” She told me:

There were times when I’d come into her office and start talking with her, and she’d be like, “Oh, I have a book for you.” She’d pull a book off her bookshelf and hand it to me. She’d be like, “Look at this section, it might be helpful.”

The same faculty member told Jessica about an opportunity to attend an exhibit in another state that was on the topic of Jessica’s thesis, and helped her to get funding from the university to attend.

Jessica was very active at the university. She served in leadership roles in university organizations, in particular organizations focused on social justice, and also department organizations. She played intermural sports and was active in residence life programming. She was also active in academics. She did undergraduate research, and served in academic support roles both in and outside the classroom. Two experiences were particularly important to Jessica: being a member of the undergraduate orientation team and working in the administrative office of her honors program.

Jessica enjoyed her work as a student staff member for the university's summer orientation program for new students. She did that for two years, including playing a leadership role the second summer. About that experience, she said: "It challenged me in many ways. It taught me a lot about social justice, which is now something I hold very close to my heart, it's one of my core values. I am very passionate about social justice." The experience also started her thinking about working in higher education:

In terms of figuring out what I want to do with my life, I talked to a lot of people that worked for orientation. They said they were pursuing higher education. That got me to thinking, maybe that's what I can do in the long term, with my life.

She also worked in the administrative office of the honors program as a student advisor. This also had an impact on her career decision: "I watched my supervisors a lot. There were certain things they did that I'm like, 'okay, when I'm a professional, I want to repeat this.'" But this direction was lacking when she first came to the university: "When I came into college what I really wanted to do was find a sense of direction." She was unsure what her major should be, so she pursued English. She told me she thought, "We'll, I like English, so I'll do that." She said that her experiences at the university

taught her to, “Be open to possibilities and, in the end, it will also be a rewarding experience. ... I still don’t know what I’m doing long term with my life, but I’ve learned at [the university] that that’s okay.”

**Michael Smith.** “I wanted to do science since I was 10,” Michael Smith told me when I asked about his experiences in college, “and how I’m actually doing science.” But he almost did not get to, as he explained:

I wanted to be a [natural sciences] major, but I have parents who are Brown and Brown parents have the stereotype that they want all their kids to be either engineers or doctors. As far as I can tell that stereotype is real because 90% of my friends ended up with parents like that.

His parents, immigrants from Southeast Asia, told him, “I had to do something with the word ‘engineering’ in it.” So, he came to the university to study engineering, which he grew to enjoy, and added [natural sciences} as a second major. He was happy with his decisions about school, and when talking about his major choices said: “I’m the kind of students who’s optimistic about fulfilling childhood dreams, even if that’s not necessarily how things go.”

Michael was active in student organizations in his academic department, and played a leadership role in a university-wide group. He was involved in a university-sponsored religious group. And, he did an undergraduate research project. About attending college, in general, he said:

I’m here mostly to learn and soak in as much as I can, and to benefit as much as I can. ... Everyone, at least my Dad, and most of the media seems to talk about how great college is and how much these four years impact you so much. I can see that. I can see why they say they’re so great.

Unlike most of the students I interviewed, Michael did not think of himself as having a classmates and friends, instead his school and personal life were the same— everything was about school for him, and he was enjoying all of it. He told me: “I learned right away in my first semester here that you have to make friends and have to make study groups, because you benefit from other people.” He also said that, “Doing homework is actually a way for me to hang out with friends.” Michael said he rarely studied in high school or for his community college classes and but struggled his first year at the university: “You very quickly learn to go to tutoring every day. I made half the friends I have now from tutoring from my first semester.” I have the sense that these types of relationships may not have come easily to him before meeting students in his college major. When I asked him about how his high school experiences prepared him for college he said, for example: “You have to learn how to work with people, and be nice, and not be very socially awkward, because if you are, your life is horrible.”

Michael grew up in “a very religious family,” and always attended a private religious school prior to coming to college. His school did not have the resources to provide advanced courses so, instead, he went to the community college. He earned an associate’s degree along with his high school degree, and entered the university as a junior. He described himself as being heavily influenced by his parents’ faith, and described himself as having “strong moral values.” He explained, “I don’t like doing things that I consider wrong. I’ve noticed that about myself more than other people.” He said he and his family’s values are, “Religious values, like, don’t be a bad person,” but

that is all he would say about his beliefs, adding only, “I don’t know how to elaborate on those [values], they all seem normal to me.”

**John Snow.** John Snow had a lot going on. He had a lot to do and a lot to say. And, he had a lot of energy. His favorite activity was serving as an Ambassador (a tour guide) for the university, which he’d done for three years. He called the experience “really, really defining”:

I came in not knowing anyone at [the university]. I loved [the business school] and the [honors] program, but [the university] is a whole, huge monster to me that I did not want to tackle. But, being an Ambassador, I love [the university] now. It’s like walking around campus and telling people why I love [the university], you’re forced to drink your own Kool-Aid.

He went on to tell me that, being an Ambassador is “kind of like a performance—people laugh at your jokes” and, he said, “The coolest thing is walking around campus and having a freshman come up and say, ‘You were my tour guild. You’re the reason I came to [the university].’”

John was a member of an all-male spirit group which, he said, got him “out of his comfort zone”:

I’m gay and I didn’t have a lot of guy friends in [high school]. I had two really close ones. It’s pretty hard to make gay friends [in his hometown]. ... [The spirit group] really helped me to realize you can have guy friends.”

In addition, to these two key activities, John was also serving in elected positions in the university-wide student government and also the student leadership group for the business school. He was also involved in social justice (gay rights) work. And, he played intramural sports. He felt these activities might be more important in preparing him for his future than were his classes, saying, “I think all the organizations I am in prepared me

a lot better for my internship this summer than my business classes did. I've had more difficult conversations and more experience on executive boards and running programs and events."

John was equally engaged in high school. He grew up in a small town with a large university which, he said, made the only high school in town very interesting—"There's a lot of farming, a lot of people who have been there forever. ... The other side is the children of the professors who have moved there to teach. That's a very intelligent, more liberal population." And, again, John was "involved in a lot." He was in student council, for example, and said, "I interacted a lot with my principals. I knew my teachers very well. They were friends. I was that type of student." He could have stayed home to attend the university there, but chose to leave. About his hometown, he said:

I really liked it. I like growing up and going to [the university football] games and being a child in [his hometown]. But there's not a lot for teenagers to do. ... The things to do in [his hometown] for teenagers are like watching a movie at a friends house, or go drinking and do drugs. There's people who chose one and people who chose the other.

John's parents were very religious—but he and his sister are not—so he grew up spending most of his time with friends from his church: "It was very interesting for me being pretty liberal and growing up in a very, very conservative place with very conservative friends."

Family and friends were very important to John. He described his family as "a very, very close," and his sister as his best friend. "We're those types of siblings that can spend tons of time around each other. I really love them. What my Mom and Dad have passed on to me is really important to me." He said that his quest for a feeling of family

drives many of his relationships, saying, “I have noticed in my life, I actually seek out family-type of atmospheres.” For example, he liked his summer internship because the company “felt like a family,” and he said his “best friends are people who take care of me.” He also said, “I picked a roommate based on someone who would take care of me a lot. It’s crazy how much I actively seek out being very, very close to people.”

But while John is and was engaged in his schools, he did not describe himself as being particularly involved in academics. For example, he was only active in some academic activities: one field-specific organizations and one semester working in an academic support capacity. He told me: “I spend the minimum amount of time on classes that I have to and it opens up a lot of other time for me to do other things.” He said, “I don’t like [my major] that much,” and that his “defining experiences,” in college, “have all come from organizations and things that I do.” He said he chose his major “because my father said I could be an engineering major or I could be a business major. I did not want to be an engineering major, so I picked business. I want to work with people.” And, even though he does not enjoy his coursework, he describes himself as being successful with it: “I’m not good at studying. I don’t study a lot, but also don’t need it most of the time. If I pay attention in class, if someone walks me through how to do something, then I get it.” He went on to say that, “I’m bad at studying,” but also that, “I’m really good at studying with people. If I talk through something with someone, I’ll remember it really well. I love group studying.” He also said that, when it comes to academics, “I love helping people,” and “I love tutoring. ... I’m not a patient learner. I like to be the one

helping and not the one being helped. It frustrates me if I don't get something and someone else does."

**Tia Washington.** Race and ethnicity have been a defining factor in Tia Washington's life and college, for her, has been about embracing that. Tia's parents each came to America from Southeast Asian, met here, and married. Tia's parents were both born during a war. Her father's parents were both from their country of origin but Tia's Mother's father (Tia's grandfather) was an American soldier Tia's mother never met. He was African-American and Hispanic so Tia, her Mother, and her sister (to some degree, she explained) have dark skin and non-Asian features. Because of this Tia always felt like an outsider: "I was caught between two worlds, trying to figure myself out." Her extended (Asian) family members told her, "You're too dark, don't get in the sun, it's dirty, or you'll be dirty." She told me: "The connotation was that being dark or being black was bad. I just naturally tanned. It wasn't my fault." She had similar experiences at her large high school in a suburb of a large city. Her classmates called her a "Branch": "Basically, I'm just a branch of this tree. I'm not really classified as it." She didn't feel like she fit with either her Black or the Asian classmates, and most of the Asian students, she said, wouldn't give her an opportunity at friendship. But, while she was rejected by Asian students in high school, she was playing the role of a first generation Asian-American at home.

Tia's father was her greatest supporter: "You have to be great. You're family," he told her. But he passed away when she was nine years old. He had always insisted that her Mother not work, but she had to go to work when he died. But, first she had to learn



English. Tia had spent her childhood at home with her Mother and, because of that, was in special English classes in elementary school until fourth grade. When her Father got sick with cancer, Tia's Mother began taking English classes. Tia's helped her Mother with her language skills and also with caring for her Father. When her Father died, their family struggled. "I had to grow up a little," Tia said, "I had to mature faster. My father told me, 'your Mom, she's doing to need you more than you need her.'" But, her Mother always told her, like her Father did, that her education had to be her priority. Tia will be the first person in her family to earn a college degree.

When Tia came to the university, she said, "I came as biology and premed, like probably every other Asian," because her Father always told her she should be a doctor. But, "pre-med was not in my heart and pre-dental was not in my heart." So she changed to a major focused on families and relationships and is enjoying it. More recently she added a major focused on her African ancestry, which has become very important to her, as she's become, "very active in the Black community" at the university. Coming to the university, which she called a "PWI," or "primary white institution" was difficult. She felt underprepared, even though she was her high school valedictorian. But, she's been determined to work hard and earn her degree. Tia said she's not sure if education really helps you to be successful in your career but said, "I personally believe that it's a powerful tool for anybody, for anyone, regardless of class, regardless of race, or ethnicity, because having an education opens doors."

Tia's been active in both non-academic and academic activities while at the university. She's been involved in social justice organizations, and served as a leader in

one. She did undergraduate research and has been active in field-specific clubs. But, her primary non-academic focus has been her gospel fellowship. Tia became a spiritual person when her Father died. He became more spiritual while sick, and asked her to join him: “Literally, seven days before he passed, I had invited Christ into my heart, I gave an invitation to Jesus to come live in my heart.” And, Tia’s beliefs haven’t wavered. She told me:

There’s a poster in my room, it’s like, “If you believe in nothing, you will fall for anything.” My moral, my value, have always been there. It’s a part of my school. I’ve always relied on him, and with my family. When it’s good times I praise him and when it’s bad times I talk to him.

## **SUMMARY**

This chapter described the study’s participants. It included demographic and academic data for each student, a summary of the students’ engagement, and student profiles. Its purpose was to create a context for the students’ stories in the next two chapters, as well as the discussion, or concluding chapter.

## **Chapter 5: Undergraduates' Descriptions of Collaboration on Homework**

As van Manen (2014) explains, “the main purpose of the empirical (and exegetical) methods is to explore examples and varieties of lived experiences, especially in the form of anecdotes, narratives, stories, and other lived experience accounts” (p. 312). That is my goal with the next two chapters: to share the students’ stories. My purpose is to find the answers to my questions in the students’ own words. In this chapter, I offer information that relates to my first two research questions. In other words: How do undergraduates describe their experiences with permitted and unpermitted collaboration with classmates on homework assignments? The framework I use is Davidson’s (2002) attributes of collaborative learning.

### **Collaboration on Homework Assignments**

All 12 study participants described engaging in permitted collaboration on homework. Seven also talked about unpermitted collaboration. The students I interviewed shared more than 40 stories about working with classmates on homework assignments. “This happens on a daily basis,” said one, “any homework I have, I either do it with someone else or I do it by myself and then we check answers with one another.” This was typical of and preferred by many of the students. As one said: “I don’t do a lot of independent work, which I like.”

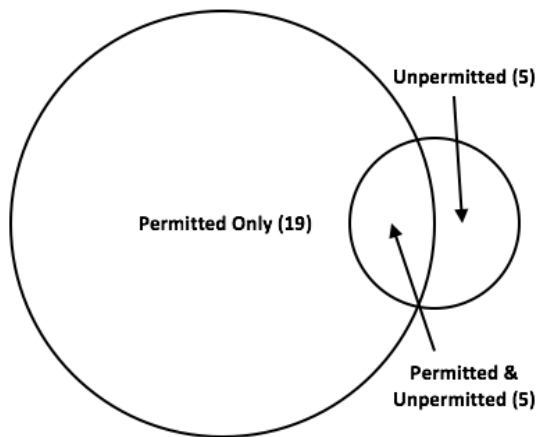
**Types of Collaboration.** Many of the students described complex assignments, groups, goals, processes, and relationships. Twenty-nine stories included descriptions of all five of Davidson’s (2002) attributes of collaborative learning:

1. an assignment appropriate for collaborative work,

2. a defined group of participants,
3. cooperation around learning,
4. individual responsibility and accountability, and
5. interdependence among participants.

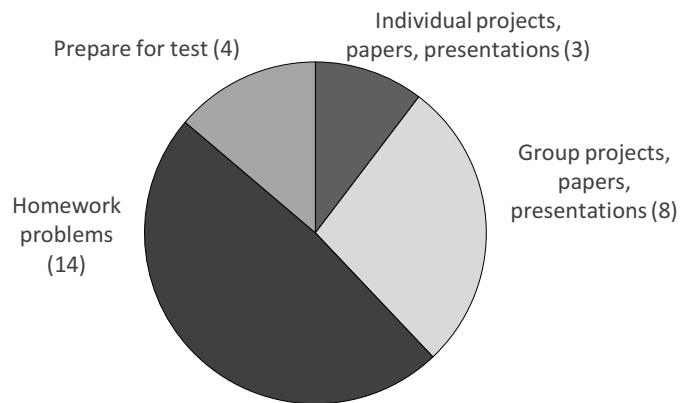
These stories are the source of my study's results. Of the 29 stories, 19 were about permitted and ten were about unpermitted collaboration. The ten stories about unpermitted collaboration were evenly divided between stories about unpermitted collaboration and stories about permitted and unpermitted collaboration in tandem. This is illustrated in Figure 5.1.

Figure 5.1: The number and types of student stories of permitted and unpermitted collaboration on out-of-class assignments, total n=29



**Types of Assignments.** The students described four distinct assignment types, shown in Figure 5.2. They told eight stories about group projects, papers, and presentations; three stories about individual projects, papers, and presentations; 14 stories about homework problems; and four stories about exam preparation.

Figure 5.2: The number and types of assignments students described that were completed collaboratively, total n=29



These four assignment types result in two kinds of deliverables: 1) projects, papers, and presentations and 2) homework problems and test preparation.

***Projects, papers, and presentations.*** In eight instances, the students developed original, shared, graded work. In the remaining three instances, the students each created an original, individual, graded work. The stories students shared about these experiences were all descriptions of collaboration that was allowed. In other words, none of the students described academic dishonesty on projects, papers, or presentations.

**Homework problems and test preparation.** Students also worked together on assignments for which they were expected to complete the academic task in a prescribed manner. These were all homework problems or faculty-provided study guides for exams. Some were graded assignments and some were to prepare for a graded test. All the incidents of academic dishonesty I learned about were within this category. But not all these collaborations were unpermitted. Fourteen of the 29 stories were about students working together on homework problems and seven included cheating. Shared work on

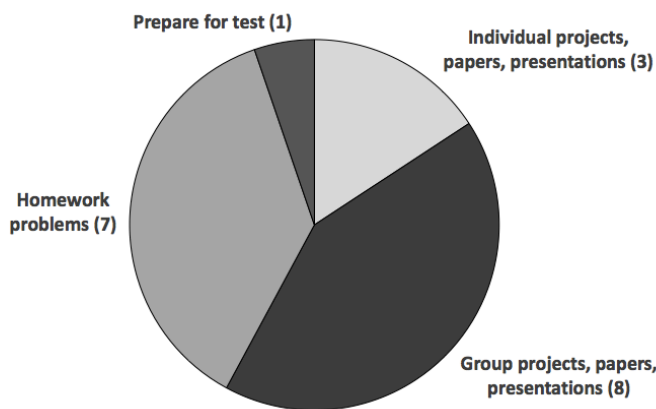
homework problems was, therefore, the most common form of both collaboration and collaborative cheating I discovered.

#### **ASSIGNMENTS COMPLETED THROUGH COLLABORATION**

The stories the students told demonstrated their engagement in learning activities suitable for group work, in particular, work that was aimed at a specific, defined outcome (Davidson, 2002). The students described working collaboratively on homework assigned for major and non-major and required and elective courses. Most of the collaborative work was for traditional undergraduate courses, but some was specific to honors programs.

The 12 students' stories about permitted collaboration represented seven fields of study: business, communications, fine arts, education, engineering, liberal arts, and natural sciences. The students told 19 stories about permitted collaborative homework, as can be seen in Figure 5.3.

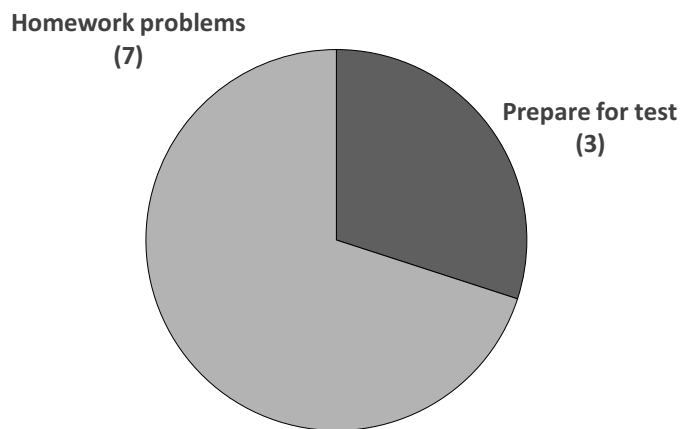
Figure 5.3: Types of permitted homework completed collaboratively and the number of stories student participants described of each, total n=19



Seven students also told ten stories about unpermitted homework collaboration. All ten instances of cheating were on problem sets assigned for homework or test

preparation (see Figure 5.4). Cheating occurred in three fields: business, liberal arts, and natural sciences.

Figure 5.4: Types of unpermitted homework completed collaboratively, and the number of stories student participants described of each, total n=10



**Projects, papers, and/or presentations.** Students shared eight stories about working together on group projects, papers, and/or presentations and three about similar but individual assignments. This collaborative work was permitted, and most was required or encouraged by the faculty member. They were the most complex assignments described. They required independent thought and decision-making, for example:

We did a case study on the VA [Department of Veterans Affairs], all that stuff with the hospitals and the waiting lists. We chose that as our case study, to review the ethics of it, the health professionals as well as the patients, and everybody who helped make decisions about how things were organized and paid for.

These types of assignments also required sustained work over time: “We had to make a five-minute presentation and then a five-page double-spaced report. We had about two months to do it.” In addition, these assignments often required students to demonstrate

their ability to apply what they were learning to real-life situations. Here are three students' descriptions:

- I have had several classes where there's a project or a paper, or it's a video that you're working on with a bunch of people. ... It's more action, less writing down.
- It's a design thinking problem. During the lab, we're doing experiments, then there's questions about the experiments.
- It's freeform thinking. Imagine: "with these specifications, how would you calculate the cost or the production rate or the Euler efficiency or whatever it is?" That's the major part of these lab reports. It's called a "free design problem."

Finally, many of these assignments had complex grading schema, including multiple deliverables and often with multiple deadlines and/or required self-reflection and/or evaluation of classmates. For example, here's one student quoting a faculty member providing instructions:

She gave us a series of check points, like the date you need to turn in the character's names, their backgrounds, and their stories: "By this point you need to have a completed outline so we can watch you in class, and review, and give you a critique." Then later, "you need to come back, and do it again, and show you've taken our criticism."

The assignments that resulted in graded projects, papers, and/or presentations are summarized below. Projects for which students submitted shared deliverables are in Table 5.1 and assignments that led to individual projects are in Table 5.2.



Table 5.1: Student Descriptions of Assignments for which they created Group Projects, Papers, and/or Presentations Collaboratively, when Permitted

<b>Group Projects, Papers, and/or Presentations – Permitted</b>
Story 1
<p>Three freshmen identified and researched a topic, and created and made a class presentation. The course met a general elective requirement. The faculty member required groups but did not assign them. The students earned a group grade. One student was not reliable and the other two lessened that student's role in the project. The two remaining students met frequently, including practicing the presentation multiple times before making it in class.</p>
Story 2
<p>Five students did research, wrote a paper, and made a presentation. The topic was an ethics case study in the students' major field. Groups were assigned by the faculty member and the topics were selected by the groups. The students received a group as well as individual grades. Students evaluated one another as a part of the grading process. The project was the primary source of the course grade. One group member did not contribute other than to be a part of the presentation. The student made excuses for this, as did the student's life partner, who was also in the class. But the unengaged student worked on campus, and the group members saw him/her. The students eventually reported the student to the teaching assistant (TA) and then later the faculty member, who indicated he was already aware of the student's lack of engagement.</p>
Story 3
<p>Three students created a dramatic performance for an elective course that explored a social/cultural topic. Groups were not required but were encouraged. The students earned a group grade for the final performance. The development of the dramatic piece was iterative and students were given feedback and grades as their performance developed. Of the three students in the group demonstrated what the interviewee described as "mental health issues" and that student's character in the play, who was struggling with his/her sexuality, came to represent the student's own struggles. That student received support from classmates regarding that stressor throughout the semester. The interviewee supported the student on their work on the project, so some of the work expected of the interviewee then shifted to the third member of the group, which the interviewee regretted.</p>

Table 5.1 (continued)

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Story 4

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Students created a paper and a presentation for a project in an advanced course required for their major. Groups were required but not assigned. Two students who knew each other from a project in another course, they added one's friend for a group of three. The project had a minor impact on their overall course grade. The students had two months to prepare and present the project but waited until just a few weeks before the due date to begin. The group did their project on a technical process specific to their field of study.

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Story 5

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Four students worked throughout the semester on multiple projects in an advanced, major-specific course. The group was required by the faculty member, but the students found their own team members. They analyzed data and created written reports, for which they received group grades. Students also earned individual grades for group participation and completed evaluations of one another to assist the faculty member in determining grades. The group's work was the primary course grade. The interviewee's group was formed by friends in their third year at the university. They had worked on group projects for past courses but none as intense or complicated as this. One friend did not pull his/her weight which caused problems within their friend group. The course groups typically continue to work together the next semester in the second course on the same topic, but the student interviewed chose not to follow the course sequence to avoid further work with and damage to relationships with friends.

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Story 6

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Four students developed a dramatic play and interactive experience for elementary-age students for a required, advanced, major-specific course. The assignment resulted in a class presentation. Groups were required but were not assigned and the students were graded individually. The students created samples of materials to demonstrate their teaching plans. They incurred expenses to do that which they had to manage collectively. The timing of the project, spanning mid-term assignments and Spring Break, made it difficult for the students to find times for meetings. Instead, they used collaborative (cloud) technologies to work together to create their project design. Once the design was complete, and when their schedules became even more challenging, they worked in two pairs, with defined roles, and communicated by email. They all met prior to their presentation to finalize their work.

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Table 5.1 (continued)

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Story 7

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Four students completed labs and lab reports for an advanced, major-specific course. The groups were required and assigned by the faculty member. The students received group grades for “design problems” that required them to gather data, apply it to a situation, and solve a problem. Each week, the students met for a three-hour lab course and had an 8- to 9-page paper due two days later. The faculty member gave extra credit if the assignment was turned in a day early. So, after completing the lab work during the assigned course time, the students met in a computer lab for up to seven hours to complete the report by the time required to earn extra credit.

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Story 8

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Six students worked together on a senior design project on behalf of an external organization. The course was required for their major. Groups were required, but not assigned. The students registered for fall and spring courses, and the group grade for the project was the sole source of the students’ grades for both. The course was important for both the students’ GPAs and resumes. The students focused on research the first semester and they completed the project the second. The students met weekly for collaborative work and reporting on individual responsibilities. They also communicated by email throughout the week. They wrote a weekly report for their professor and the representative of the external group. The deliverables for the project were a written report, a presentation for the external group, and participation in an “open house” (poster session) where they discussed their work with classmates, faculty members, university administrators, and representatives of all the external groups sponsoring the course projects.

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Table 5.2: Student Descriptions of Assignments for which they created Individual Projects, Papers, and/or Presentations Collaboratively, when Permitted

<b>Individual Projects, Papers, and/or Presentations – Permitted</b>
Story 9
<p>Two students worked together throughout the semester on class preparation and writing assignments for in a course on the history and culture of the world’s region from which the students’ families originated. Collaboration was not required nor encouraged by the faculty member, but was allowed. The course met a general studies requirement. The course grades were based on written work and the course deliverables were personal reflections on readings and discussions. The course readings were challenging and the students met to review and discuss them, and to prepare for and reflect on class discussions. The students met in another course they also shared, for a core academic requirement, and they worked together for that course too. Both students became passionate about the course subject during the semester, especially in comparison to the other course in which they were simultaneously enrolled. Their friendship continued after the close of the term.</p>
Story 10
<p>A pair of students each created individual written work, in a format specific to their field of study, and in two languages. Each student did a draft of each assignment and then they would meet to provide one another feedback. Collaboration was not required nor recommended but was allowed. Students in the program in which the students were studying were organized into cohorts and the students were in the same cohort and lived in the same residence hall. The students’ completed assignments were unique and graded separately. The interviewee provided more help to the other student, primarily due to the interviewee’s superior fluency in one of the languages. The interviewee sometimes felt it took too much time to support his/her classmate, and so the student sometimes chose not to provide the other student with the expected feedback.</p>

Table 5.2 (continued)

Story 11
<p>The student was assigned to write and direct a short video, and organized three classmates to help. It was for a required, upper-division, major-specific course. Groups were required but not assigned. Participants not enrolled in the course were also allowed in teams, and two of the students who helped were in the class and one was not. The project grade was an individual grade for the student author/director. The faculty member also gave participation grades for being a part of another student's project, and students were required to earn a spot in the credits of at least one other student's video. The interviewee did the lights, sound, and camera work even though other students could be assigned any role other than writing or directing. The three other participants were actors in the student's video, and they worked together to personalize the script and scenes. Filming took place on campus on four days over two consecutive weekends. The student organizer used a Facebook group to coordinate filming and thanked the other students by taking the group to dinner once each weekend. The student also worked on the project of one of the team members.</p>

**Homework problems and test preparation – unpermitted.** Table 5.3 has summaries of the students' stories about working together on homework problems when it was allowed. Working on homework problems was the most common form of collaborative learning the students I interviewed discussed, and many described them as "difficult." Unlike the projects, presentations, and written work summarized in Tables 5.1 and 5.2, the students were all expected to turn in the same thing – a worksheet with the correct answers. Similarly, Table 5.4 has one final story of permitted collaboration, on test preparation.

Table 5.3: Student Descriptions of Completing Homework Problems Collaboratively, when Permitted

Completing Homework Problems Collaboratively – Permitted
Story 12
<p>Six freshmen met each week in an optional course tutoring session to work together on homework problems with support from a student tutor. This was for an introductory course required for their major. The course was difficult, and the course grade played a role in whether the students could move into the major during their sophomore year. The homework assignments were individually graded. Collaboration was encouraged by the faculty member as was participation in the tutoring session. The tutors also encouraged the students to work together. The students met weekly and, after the first few weeks, with the same group each week. They also met and worked together at institution-organized study sessions held in advance of each test.</p>
Story 13
<p>Five students worked on homework problems each week during the spring semester of their freshman year. Collaboration was not required but was recommended by students further along in the same program. The homework assignments were difficult, and the student described the course as a “weed out class” for the honors program for which it was required. Students had to learn a complex computer program that is used in their field, and the student described the experience it as “hands on learning.” Students met the day before each class to review the homework assignments. The students had typically completed the questions previously, and then they worked through each problem together. Not every student came each time they met but there was a group of three students that met every time.</p>
Story 14
<p>Five students met twice weekly to complete assigned homework problems for an intermediate course required for their major. The same students had worked together in the pre-requisite course. The course was not known to be difficult but the study indicated he/she had been assigned to a weak instructor and said that, therefore, the class time did not prepare the students for the homework assignments, and that made the work difficult. Homework grades were a key component of the final grade in the course and were earned individually. Collaboration was not required nor encouraged, but was allowed.</p>

Table 5.3 (continued)

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Story 15

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Five students worked together multiple times each week throughout the semester to complete homework problems for an introductory course which was required for their major. Groups were not required nor encouraged but were allowed. Homework was due each class. The students completed the homework problems individually and then met to review their work prior to each class. The students used a Facebook group to coordinate their meetings.

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Story 16

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A pair of students worked together on homework assignments for an advanced course required for their major. A third student joined them to study for tests. Collaboration was not required nor encouraged but was allowed. Homework assignments were individually graded and had a significant impact on the final course grade. The professor provided answers to the questions so students could check their own work, but did not provide details on how to complete the problems. The students did the homework problems in advance of their meetings. They helped each other when doing that by text or by phone, often sending photos of their work by text. Then they met to go over any remaining questions either had. They also met and reworked graded homework assignments in preparation for tests.

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Story 17

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Two students worked on homework problems for an advanced course required for their major. Collaboration was allowed, but was not required nor encouraged. Grades were individual and credit (and partial-credit) was given for work shown. There were two assignments each week, one due each class period. At the beginning of the semester, the students met after each class to review and begin the work, then each student completed the problems individually. As the semester progressed and the work became more difficult, the students' meetings became longer and more frequent, and they completed all the work together.

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Table 5.3 (continued)

Story 18
Four freshmen worked on homework assignments that did not have a significant impact on their final course grades. Groups were not required but were strongly encouraged. Each group turned in one copy of the completed assignment, groups could change throughout the semester, and the faculty member assigned grades based on whose name was on the submission. Prior to each class, the students in the group met and worked on problems individually first, and then they reviewed each other's work. They discussed and selected the best answer for their submission. At the beginning of the semester, some students put their names on submissions for which they did no work, and the students who did the work allowed it. But as the semester progressed, the students in the class would no longer allow other students to earn grades for work they didn't do. No one wanted others to take credit for their work, and they came to believe that the assignments were needed for test preparation.

Table 5.4: A Student Description of Working Collaboratively to Prepare for Exams, when Permitted

Preparing for Exams – Permitted
Story 19
A pair of students worked together throughout the semester to gather information and study for tests. The tests were the sole source of the course grade. Collaboration was not required nor encouraged but was allowed. The students created lists of questions when studying individually, then they met to review the material, answer one another's questions, and work out what either knew. At the end of the study session they divided their remaining questions between them, adding any that seemed crucial or to both lists. Then one went to the professor's office hours and the other went to the teaching assistant's office hours, then they exchanged information. The student said they did this to be efficient and because they found that the professor and TA shared different but equally helpful information.

**Homework problems and test preparation – unpermitted.** Half of the stories the students told about unpermitted collaboration were stories of permitted collaboration that “crossed the line” and becomes unpermitted. This happened on both homework



problems and test preparation. Table 5.5 provides details regarding the types of assignments and corresponding types of unpermitted collaboration.

Table 5.5: Numbers and Types of Assignments and Forms of Unpermitted Collaboration on Homework Problems and during Test Preparation, n=10

# of Stories	Type of Assignment	Type of Collaboration
5	Homework problems	Unpermitted
2	Homework problems	Permitted and Unpermitted
3	Prepare for exams	Permitted and Unpermitted

As with the assignments for which students could work together, students working together when it was not allowed also reported their assignments were difficult. For example, one student described these homework assignments as, “very long, and hard, and tedious.” Another said faculty members were “quite nitpicky,” when grading and that the assignments were “really hard to do by yourself.” The student went on to say that “it can be quite frustrating.” Even with help, some couldn’t finish it: “Together we would, most of the time, be able to finish the homework, but sometimes not.” Several students who cheated did so on computerized assessments, which they also described as challenging:

It’s homework you do at home online. It’s not fun. You could have the right answer, but they really want it to be specific, or it’s like the right answer in a different way. It’s weird. They give you multiple times to try it, but they deduct points based on how many times you try it. Let’s say, you get it right the first time, you get 100%. Let say you get it wrong two times, then they deduct two out of six [points], because you got two wrong, and you only get the rest of the points.

Although these students were often completing worksheets or study guides, they were typically not doing simple tasks. Here’s one example: “The professor grades you on your

work, not on the final answer. The final answer is important, and if you get the final answer wrong you will not get full credit. At least half of the credit is the work.” See Table 5.6 for summaries of the student’s stories about unpermitted collaboration on homework problems and Table 5.7 for students’ stories about preparing for tests collaboratively when it is not allowed.

Table 5.6: Student Descriptions of Completing Homework Problems Collaboratively, when Unpermitted or when both Permitted and Unpermitted

<b>Completing Homework Problems Collaboratively – Unpermitted</b>
Story 20
<p>Two students worked together on homework when it was not allowed during three classes on the same subject over three consecutive semesters. The courses met a general requirement for the interviewee’s major and were elective credits for the interviewee’s study partner. The students also got help from a member of the study participant’s family who is proficient in the skills needed for the assignments. The two students were childhood friends who had studied the same topic together during high school, and the students worked together on homework when it was not allowed then as well. The two students were roommates throughout college, and studied for tests for the courses together too, which was permitted.</p>
Story 21
<p>A pair of students worked together on homework when it was not allowed in an advanced course required for their major. The homework problems were individually graded and of moderate importance to the final course grade. Each completed the homework individually and then they met to review it prior to the due date. They compared answers and worked together when their responses differed. Although the student participant shared that students in the degree program would not give one another homework answers because of the work required to complete it (for the person being asked) and the need to understand it (for the person asking), the student also stated that if either of the study partners were busy and didn’t finish they could copy the other’s answers. They could ask one another for that, the student said, because they were friends and they understood that if the other person ran out of time they could learn it later. The interviewee indicated that, regardless of faculty rules against working together on homework, the student worked with others (like this) for every class.</p>

Table 5.6 (continued)

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Story 22

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Five students studied together for a difficult core course in an honors program. Collaboration in study groups was strongly encouraged by the faculty member. Students collaborated to complete weekly homework problems and to study for tests. The students used a Facebook group to communicate. There, they divided up the problems and each completed some individually. If they needed help, they sent photographs to one another by text. They then met and the person who completed each helped the others to work through the problem. All of this was allowed. But, the interviewee's group also used an online database that was not allowed, of completed homework and test answers collected and shared by past and current students in the honors program. The instructor reused his problems, and often with the same numbers in the formulas. The interviewee's group learned about the database mid-semester and used it for the remainder of the class. They used it as a group and individually. In addition, tests were completed on personal laptops and, during them, the students were not allowed to go online. Some students used the database during tests, but the interviewee did not, due to lack of time. This was the only course in the program for which this student reported there was this type of database. The student believed that the faculty member and administrators of the honors program were aware of this cheating and did nothing about it. The student related a story about a friend who reported it to a program administrator, and said that hadn't impacted the availability and use of the database.

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Table 5.6 (continued)

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Story 23

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Three students within a larger group worked collaboratively on homework throughout the term, which was allowed, and with the answers to the problems, which was not allowed. The homework assignments made up a significant portion of the class grades. This was for a required course for the students' major, but was not in the students' field of study. The class was challenging and the homework was time consuming. The faculty member encouraged the students to form study groups, but the assignments were turned in and graded individually. Students were required to show their work on the homework problems and could receive partial credit, even if their final answer was incorrect. The student explained that two of the three students were working in the library and a senior who was pursuing a degree in the field of study of the course approached them and offered them solutions to the homework. He gave them a binder filled with the completed assignments that they copied and returned to him. They used the information throughout the semester, but without the knowledge of the other students in their study group. During their study sessions, the students would use the answer keys to make suggestions to the larger collaborative group when they were stuck on a problem. They communicated by text to make decisions about when to provide a "clue." The interviewee also used the solutions when working independently. The students who cheated did not want their classmates to know. The student said that cheating was more acceptable among students majoring in the field of study of the course, and said that students in the field in which the student was studying were focused on learning and did not approve of cheating. The three students destroyed their copies of their answers at the end of the semester. They felt that sharing it would impact their reputations negatively among their friends and classmates.

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Story 24

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A pair of students worked together on online homework problems throughout a semester when it was not allowed. The homework was assigned for an upper-division course that met a general requirement for the students' degrees. The homework was due each week and was important to the overall course grade. The homework was difficult and required the use of field-specific symbols and language. In addition, the online homework system required specific responses, and the students took turns submitting possible responses so that neither lost too many points due to incorrect answers. The students were aware of and discussed that they were cheating. The students attended high school together and worked together as classmates and friends then as well as in college.

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Table 5.6 (continued)

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Story 25

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Three students worked together throughout the semester on online homework problems for a required, introductory, major-specific course. The assignments were graded individually, and the faculty member required that the assignments be done individually. The online homework assignments made up an important part of the course grade. Instead of working individually, the students met and worked on the assignments together. In addition, the homework software required precise answers and only allowed the student three tries for each, so the students took turns trying answers so they could earn as many points as possible for each problem.

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Story 26

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A small group of students in a core course for freshmen created a Facebook group to coordinate study groups, with the professors' encouragement. They used it to create multiple study groups for more than 500 students. Ten to 15 students, including the interviewee, met in the university's main library twice weekly to complete homework problems. The interviewee always attended the same study group and other students did the same, so the group was typically made up of the same students each meeting. But although the students could study together, they were expected to submit their online homework assignments individually. Instead, the students in the group members worked together. In addition, the students were allowed six tries for each problem in the online homework system, and the total points available to them was reduced for each try. So, the students took turns trying answers and sharing the correct ones, so they could each earn as many points as possible.

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Table 5.7: Student Descriptions of Working Collaboratively to Prepare for Exams, when Unpermitted or both Permitted and Unpermitted

<b>Preparing for Exams – Unpermitted</b>
<p>Story 27</p> <p>Three freshmen answered what they believed were online homework questions, at the start of the semester, for a required, core course. The questions were difficult and the students did not get a high grade. The student indicated the professor seemed to be using the words “homework,” “quiz,” and “tests” interchangeably when presenting the syllabus on the first day of class and during the next class, the professor asked about the students’ experiences with the “quiz.” This led to a class discussion about whether they had completed homework or a quiz, and whether collaboration was allowed. It was not. Later, one of the students who worked in the interviewee’s group contacted the student by text, indicating the other two students were meeting to work together again and asked if the student in the study would like to join them. The interviewee reminded the student what the professor said and declined to join them.</p>
<p>Story 28</p> <p>Three students worked together on ungraded, faculty-provided study guides for tests in a required, core honors course. The faculty member encouraged students to study together, and with the study guides, to prepare for tests. Exams were the sole source of the course grade. The faculty member allowed the students to use class notes and the study guide during the tests, but no other materials. Prior to meeting to study for each test, the students would divide up the questions and each provide the answers to some on a shared online document. They would read others’ answers and would discuss some, but not all, when they met. Then, each would print and use the shared study guide during the open-notes test. The interviewee believed that the students had cheated, as their answers on the tests often came from the other students’ work on the shared document. The student said they discussed asking the faculty member if cooperating on the work, as they were doing, was allowed. But decided not to do. The student indicated they had discussed it, acknowledged they were cheating, and agreed that they wanted to continue cheating.</p>

Table 5.7 (continued)

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Story 29

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A pair of students worked together to study for the final exam for a course that met a general elective requirement. The test was an important part of the course grade and working together to prepare for the test was allowed by the instructor. One student was provided the test questions by a student who had already taken the test, and wanted to limit their study time to only those course topics. The other member of the pair, the interviewee, thought that was cheating, was concerned the information might not be correct, and asked the study partner to be more thorough in their studies. They agreed to that plan, but then started with what was on the sample of the test they had received and then only studied the concepts represented there.

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### **THE FORMATION OF GROUPS FOR COLLABORATION ON HOMEWORK**

The groups included in this study were made up of specific students who engaged in coordination of shared work toward defined academic outcomes. The students described stable, ongoing groups that worked together throughout an assignment, course, or degree.

**Group size.** Davidson (2002) predicted the students' collaborative groups would be small, and that was mostly correct. The permitted collaborative groups had just two to six students and all but one unpermitted group had two to five members. The students I interviewed preferred small groups, mostly due to the ease of communicating with, managing input from, and generating feedback within them. Others said smaller groups better support learning. Here are two students talking about their preferred group size:

- I would say not more than five people at most. Once it's over that, it's just kind of a crowd. To actually be able to communicate effectively and get stuff done, I tend to work with at most three to four people.
- [The work] goes by faster if the group is small. If it becomes more than five, then you just start talking and it becomes a party. If it's a small enough,

focused group, then you can get through the homework faster and you can learn a lot more.

That said, some students indicated they would be willing to work with a larger group if it is made up of past collaborators or friends, or friends of friends. Here's one student's reasoning:

Out-of-class work is normally two or three [students]. When it comes to group projects, it's normally three to five. It also depends on who's taking the class. When we were in [course], we had a group of five, because all of us [friends] were in the same class together.

**The role of the faculty member.** Faculty members either required or encouraged collaboration in 11 of the 29 stories gathered. All the groups that worked collectively on projects papers, and/or presentations were required or recommended by the instructor, and all the students' collaborative work on individual projects, papers, and/or presentations was organized without faculty influence. Most, but not all, of the students' work on homework problems or test preparation was organized by the students without faculty recommendations or requirements. The faculty members' influence on the formation of the collaborative groups included in this study are outlined in Table 5.8. In addition, the faculty members' role is described in the summaries of the students' stories provided in Tables 5.1-5.4, 5.6 and 5.7.



Table 5.8: The Role of the Faculty Member in the Formation of Student Groups, with Types and Numbers of Permitted and Unpermitted Assignments, n=29

How Group was Organized	Permitted Collaboration (19)				Unpermitted Collaboration (10)	
	Projects, papers, presentations (11)		Homework problems and exam preparation (18)			
	Group Proj. (8)	Indiv. Proj. (3)	Home- work (7)	Exam Prep. (1)	Home- work (7)	Exam Prep. (3)
<b>Faculty required collaboration (6)</b>	6	--	--	--	--	--
<b>Faculty encouraged collaboration (5)</b>	2	--	3	--	--	--
<b>Students organized without faculty (18)</b>	--	3	4	1	7	3

Note. For the two group projects for which faculty members encouraged collaboration, the students could choose to do the assignment individually or as a part of a group.

In 11 of the 18 stories the students told, the faculty member required or recommended that the students work together, but the group members were rarely assigned. Here are three students sharing faculty members' encouraging words:

- They would always say, "make sure you collaborate with your partner or partners."
- You could do the homework yourself and some people did. But really the groups were almost mandatory. He said, "this is group homework, I encourage you to get in groups to do it."
- The professor would encourage us to share ideas and to get help from each other: "Get someone to check it."

In the remaining instances—or, most of the students' work together—the students organized themselves without any involvement by the faculty member. Many students said they did so due to challenging coursework. Here's an explanation from one student:

“We’re just like, ‘this stuff is getting too hard, let’s use our brains together,’” adding “it’s so painful.” And another student said that while, “other people seemed to be able to finish the homework all by themselves,” he/she “could never do that.” Some students described specific aspects of a course that led them to work together. For example, one student said: “It was not supposed to be a hard class, but my professor was horrible.” About one course, a student said: “it’s not my cup of tea.”

**Relationships between group members.** While some students wanted faculty members to assign their work groups (“I prefer being assigned because I usually have a fear of being left out,” said one), most preferred to identify their own team. For students new to the institution, these were often relationships of convenience: “We were part of the same cohort, we had the same assignments, and we lived in the same residence hall, so it was easy to get together,” said one student. Here are two more descriptions, the first from a student who cheated and the second from a student who did not: “It was like, ‘I need help with my homework. You need help with your homework. Let’s all just sit down and walk through everything together,’” and, “all of us had homework and we all had to finish it.” The two most likely sources for collaborators were learning communities and shared coursework.

Many students found and continued to work with students they met in institution-organized learning communities. These were organized by academic departments or residence halls or were within honors programs. “I was in [a freshman learning community] the first year of this group. I just said, ‘Hey, you three, do you want to do homework with me?’ [They said] ‘sure, why not?’ It was a mutually beneficial situation,”

explained one. The relationships formed in learning communities seemed to be particularly long-lasting. Multiple students described study and work groups that met in freshman learning communities and continued to work together throughout their time at the institution. Students also developed collaborative groups with students in their core courses or their major courses, or both. In some cases these were long-lasting but in others they were not. One student compared his/her experiences with a faculty-created group during a freshman course and one formed through a learning community: “The [course] group didn’t last. One person dropped out of college, the other two, I never see them. The people I work with are the people from my learning community. I kept those friendships, which is nice.”

Even students without the benefit of these long-term, institution-organized study groups were more likely to work with the same students repeatedly the longer they were enrolled. Here’s one student describing how he/she found group members for an assignment:

One of them, I took [a course] with him three semesters earlier. We got to know each other through that class. After that semester, I didn’t see him for three semesters because I took a semester off to work and he took a semester off to work. Finally we were back in class together. The third student, I’m not sure exactly if he was a friend of my friend. He did sit in front of us. My friend asked him if he wanted to join us.

Groups formed by students in the same major, especially by students who entered the program at the same time, were also often long-standing. These students must take the same courses, and in a similar sequence and, therefore, can be enrolled in classes together repeatedly. Here’s one student’s description:

It all started with the people that I sat by. That's how we got to know each other, because during the class period the professor would have us work on certain things together. Even out of class, when we would have homework, it's just instinct to contact that person who you worked with in class. More than likely, that person has spoken to another person in class so there just starts to form this group. That's how we start to know each other.

Again, many of these relationships continued after the first shared assignment or course.

One student explained to me how he/she met a classmate with which he/she had worked throughout their time at the institution, and who had become a friend: "I started working with her because I noticed that she was in another class, and so 'oh, you're in my [subject] class!' We got to know one another that way and so we started working together for both classes."

Several students described relationships or groups they formed early on and continued to be a part of throughout their college career. In some of these ongoing relationships, students even coordinated their class schedules so they could continue to work together. Some of these relationships also evolved into friendships:

- I met these people during my first year of college, this really good friend that I've had since freshman year of college. We worked on calculus together, as we work on everything together. We're in the same classes. My first go-to is always [student name], because we are used to each other. She knows what mistakes I would make, and I know what kind of mistakes she would make.
- The first year of [academic program] you find the people who you work together to mutually improve one another. A lot of times when you work with certain people, they bring you down a little bit, and you're slowing down a lot. But if you find people who are on the same level as you, you can pull each other up. I do collaborate with new people that I meet, but I feel like personality-wise I get along with my close friends a lot better, and they know me a lot better than other people.

One student described a study group that had become friends by saying: “the group was great, some of my best friends from college, which was also really lucky.” Another explained: “we were able to build a relationship, but it started so that we could get through the class.”

Nevertheless, the students I interviewed had mixed experiences with and beliefs about working with friends. For example, here are two students’ responses to my inquiry into what was needed to create successful collaborative groups:

I don’t really know exactly what words to use other than “liking each other.” Our group ate together occasionally and we met up. That definitely helped us succeed. It wasn’t just show up and do your work. It was also like community building. We have a common goal and because of that we’re able to work together more effectively.

I think a big [aspect of collaboration] is respect. I think we have an established work relationship, where we’re friendly with each other but we’re not going to go hang out outside of class. I think I have hung out with my one partner from that project once outside of class. The other three partners, I don’t see them outside of class. Most of our talk is about school work

Students also discussed the attributes of the group members they prefer. For example, when I asked one interviewee about the ideal size of a collaborative group, the student also described the classmates with which he/she worked in multiple courses:

I’ve got one [Student A] that I study with all the time, another [Student B] that will come in sometimes. [Student B] is a procrastinator. Me and my friend [Student A] start really ahead of time and [Student B] comes in at the last minute. [Student A] and I will study together very far in advance. But the others in our study group, one of them has already taken the class and the other one’s in a class with a different professor, so we can’t really collaborate with them as much. So, it depends on who’s in the class and who’s available.

As with the student who provided the last quote, several students talked about preferring to work with others who had similar work styles, and in particular, other students who are responsible. As one student explained it:

During my freshman year, I had a project where I had to work with two other students. They reflected the two different attitudes that you come across with when working with partners. One of my partners she was quite responsible. The other student he didn't go to lectures. He really was just wanting to pass the class.

And, here is another student's description of a study partner of several semesters:

She's quite responsible, but very flexible with when we want to meet. When we were working on the homework assignments twice a week, we just met up, and, if you encounter any problems, you don't know how to do it, just ask the other person.

The students I interviewed also talked about the impact the group dynamic can have on beliefs or values related to school work. One said: "The attitudes of your partners can really affect you." Another described one early experience with working with a collaborative group:

It was our first semester, freshman year, and all of us, we are depending on our academic background. The first semester you can either be successful or you can think that you can do the bare minimum and get by. For me, with that class project, we saw how the attitudes of your partners can really affect you.

Another student, who had been at the institution for several years, said:

I worked on quite a few homework assignments and projects with other students during my college career and I just want to emphasize this point: I think your attitude about how you get along working collaboratively on homework or a project really depends on who you're with.

In addition, these long-standing collaborative work groups made up of students in the same major are recognized by students within the same degree plan. Here's an example:

For [course name] there were different groups doing the same homework. We would sometimes, if none of us could figure it out, we'd pull somebody in from a different group and ask them: "Hey, did you figure this question out?"

Finally, the experiences the students described about groups that engaged in academic dishonesty and those that did not were indistinguishable from one another, and this was true whether the student was a part of the cheating they described or not. For example, here is one student's statement about a group in which cheating occurred:

Something that everyone encourages you to do is find a study group: "work together on homework's, find a study group." I found a group of friends in my class. There are three or four people besides myself. [Course] homeworks were usually about 15 problems. That might not sounds like a lot, but for that class it was too much. It was a really difficult class.

#### **COOPERATION AROUND LEARNING AND IN SUPPORT OF COLLABORATION**

Listening and honest and open debate are hallmarks of the cooperation that takes place during collaboration (Davidson, 2002). The students I interviewed shared multiple stories of this type of interaction, both when working together on homework was permitted and unpermitted. Their stories provide insight into the roles students play within collaborative groups. In addition, I found that the intensity of the students' engagement in collaboration varied, based on the structure of the group's work process.

**Listening, discussion, and debate.** Students talked about their experiences with discussion and debate throughout all phases of their collaborative work. This included communications and decision-making about the mission and the purpose of the group. "One section of the group might think that success is this, achieved doing this. Whereas another group might have a different understanding of what success is in terms of the

project,” said one student. Others shared details about the process of deciding how a team would fulfill their assignment, for example, deciding on a topic for a paper or presentation. Here’s one student talking about generating options for a project’s focus: “Some person would say one idea. Someone else would say a completely different idea. It was nice having multiple ideas bouncing around the room. We talked and decided, ‘okay, this sounds like the right way to go.’” And, here’s another:

There were four of us, we all were sitting around drinking coffee and we were shooting ideas, just writing them down when they came, just coming up with as many as possible. Once we had a list of twenty something, we could make a decision what to do.

This type of engagement was common. Students talked extensively about ongoing dialogue toward group decision-making and problem solving. For example, one student said: “You discuss why you did it a certain way, and why they did it in a certain way, and which way is better.” Or, as another student explained when talking about both permitted and unpermitted collaboration, “most of the time we would want to talk it over, even if we had done it already, because it definitely helped to have more perspectives.” The students valued these interactions with their classmates and saw them as opportunities for learning. For example, one student (who had participated in unpermitted collaboration on homework) told me: “Whenever you’re debating with somebody, you’re questioning your own beliefs. That helped me a lot.” Here are two additional students’ descriptions of these types of conversations, first permitted and then unpermitted:

- We all worked together as much as we could. It was very collaborative. That helped a lot. Sometimes I would do things and someone else would say, “no that’s wrong,” and we would talk about it and eventually come to a conclusion. We all had weaknesses.



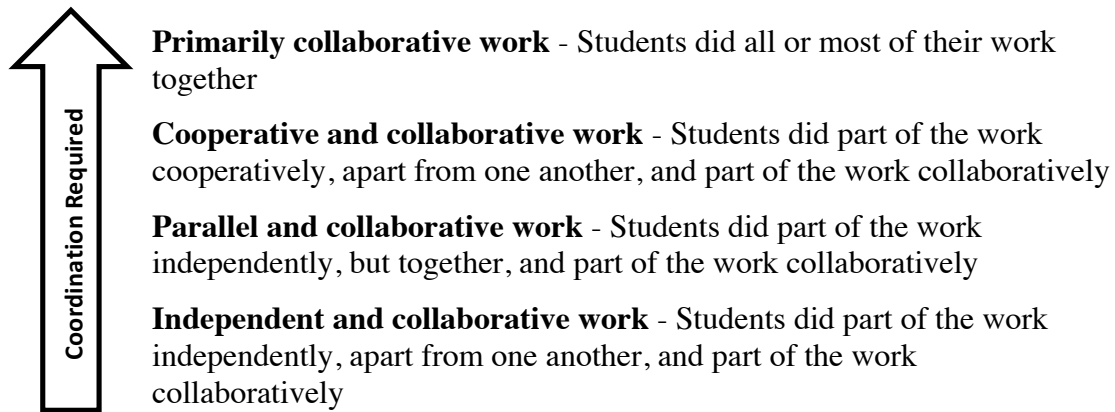
- Maybe we had different paths that led to different answers. We would debate which one was the correct one. Then we would choose the right one. And, that's how I remembered how to do it for the test. That's how I would do it afterward.

Finally, students talked about the importance of listening. For example, here's one student, talking about collaborative work on individual projects:

I had no clue what vision they had or how they were putting it together. It was really learning to listen to them and trying to help them create their vision. Learning to listen to others, and making sure you're working on their vision, will be important for our careers.

Structures of collaborative work. The students also described the cooperative processes by which they completed their shared work. These processes can be organized into four distinct patterns of teamwork, based on if and how students worked independently or in subgroups, and whether and when they worked together or apart from one another: 1) primarily collaborative work, 2) cooperative and collaborative work, 3) parallel and collaborative work, and 4) independent and collaborative work. Each of the four structures required coordination or, more specifically, communications and planning in support of collaboration. The complexity of this coordination varied, based on the structure of the group. All four structures were used for both permitted and unpermitted collaboration. They are described in Figure 5.1, which also demonstrates the relative degree of coordination required for each.

Figure 5.1: Structures of collaborative work and the relative amount of communications and coordination required for each



**Primarily collaborative work.** The most intensive of the four collaborative structures was when the students completed almost all their shared work together. Here's one example:

For a typical week, we would meet up, we would go over what different check marks we would reach in terms of working on the project. It was a yearlong project, so we had to make sure that we would meet all the different deadlines so that we would be able to finish the project in time.

When the groups met—frequently, for many groups—the students described being engaged and focused in their work together. Here's one student talking a group's process:

We usually meet up at the computer lab. We'll just start tackling different pieces of the work. One says, "all right, I'll start working on the lab questions." Another says, "I'll start working on the design problem." Another says, "I'll start working on the method section and putting it all together, the entire report," or someone says, "I'll start working on the sample calculations." Then we just start doing it. When we need help, when we need another set of eyes, we ask, because we're in the same room together. Then, after

we finish what we're doing, we tackle something else. We tell each other what we are doing and what we need. When there's nothing else left, we're done.

And here's an example of students working this way while cheating:

We would work in the library. We would collaborate on the homework, trying to figure it out together: "How do you do this? How do you do that?" One of us would put the answer in [to the software program] and most of the time, it was right. But if it wasn't, we're like, "okay, let's try it again." If one person misses it then somebody else does it. We eventually would get it, and most of us wouldn't just get a partial credit.

In addition, these groups required considerable coordination and communications toward gathering to work together. For example, here is one student's description of the weekly schedule maintained by a permitted collaborative group:

We usually have our lab from 1:00 to 4:00 or 5:00 [p.m.]. The reports were due two days later at 8:00 a.m., but if you turn it in the day directly after the lab assignment day you get ten percent extra credit. My group, we tried to turn it in by the 8:00 p.m. deadline the day after, in order to get that ten percent.

And here's a student's example of the type of work and coordination processes for a group of students that were engaged in both permitted and unpermitted collaboration:

It was 10 or 15 questions and it was one or two homework assignments each week. We would work together in the library. We had a Facebook group, and we added all the people in the class. We set up study hours there, working with the TA [at] times too.

The students also used collaborative online tools to work together at a distance. Here's one student, describing working on a presentation online: "We each took one of the slides and typed out the slides together. We did it from our different locations but could see each other's. It was nice. We didn't have to be together but we did it together."

**Cooperative and collaborative work.** In other instances, students worked cooperatively—each completed portions of the assignment independently, in pairs, or in small groups—and then worked collaboratively with the whole group on other portions or to put it all together. For example, one student said that their group met to select a project topic, “we all researched and eventually we came to a consensus. There were a lot of ideas that were the same.” Then, once they’d begun their work: “we would send each other draft papers or even paragraphs to revise and edit, to make sure it’s okay.” Finally, the students worked together collaboratively and in the same room to combine their drafts and finalize their project. Here’s another student’s description of the final phase of a project: “Once we had our drafts we would come together and we would review it, look at each other’s work and give each other feedback. We would make sure of grammar, spelling, and checked all that.” The student went on to describe their conversation, saying: ““Let’s look at each other’s work and see if there’s anything we can improve on.”” This form of working together was also seen in unpermitted collaboration. For example, here’s one student talking about working together when he/she believed the group was cheating:

We were given study guides and some of the questions in the study guide were on the test. The test was all essays. What my group did, me and two other people, we split it up and typed it out on a Google Doc and then we read and discussed each other's answers to understand, “okay, this is how you can answer this question.”

This cooperation required coordination, including navigating the process of making assignments. For example, here’s one student’s description: “We usually split up the work. It’s not like we’re like, ‘this is your third of the work, this is your third, this is

your third.’ Instead, it’s pretty organic. I’ll say, ‘okay, I’ll start working on this.’” The students also set deadlines for themselves, including planning when to share their work. Here’s one student’s description of the division of labor for a project for a long-standing team of friends who were also classmates:

We keep each other accountable. We make sure that we all fully understand what’s going on. When we have a group project together, we’ll separate the work, and then, “okay, everybody has it done by this day.” I normally get mine done a little bit every day. [Student name] gets all of hers done on the first day, and then [student name] gets his done the last day. In the end, everybody’s is done. It all comes together nicely.

Most of the students who described working cooperatively and then collaborating did so by choice, and most said they believed it was efficient. But, there were some instance where groups that were forced to work cooperatively, rather than collaboratively. Several students talked about dividing into small groups or using online communications or collaboration due to scheduling conflicts. Here’s one example of a group of students’ preparations for an in-class presentation (that included an activity using paper pizzas):

We had really rough timing. It was near midterms. People were going home and other people were studying for their exams. For creating the pizzas, we had to get all the materials. One of my partners and I we went to Hobby Lobby. We got all the stuff and we cut out all the pizzas. We were the ones who did all the work and the other two paid for it. They were like, “we’re really sorry we can’t be there, but we want to help.” They made the poster later, the one we used for the presentation, and we didn’t help with that.

Students also talked about other cooperative efforts. For example, here’s one student talking about how, when working with another student, they both gathered and shared information: “Sometimes she will go to the professor’s office hours and I will go to the

[teaching assistant's] office hours. Then we exchange information so we'll be more efficient. They give us different hints for tests." In other words, each was responsible for gathering information from a different source of information and then they combined what they'd learned.

**Parallel and collaborative work.** Other students worked independently but together and then collaborated to assure understanding or to complete the project. They were in the same physical space completing the same or similar work at the same time, but each on their own. Then they shared, referred to, and completed that work collaboratively. Here's one student's description: "Sometimes there was ten minutes of silence where we would be working and then someone would say, 'how do you do this part?' and we would go over what we had done, and talk about it." And here's another student describing shared efforts at understanding difficult class readings: "I worked with this one girl. We would go over the readings together because the terminology was over our heads. We would go over it individually even though we were sitting by each other and then we would discuss it." Finally, here's another student's description:

There's a group of people working on it, it is kind of individual, kind of in a group. We'd all be working on a question. As soon as somebody got it or maybe two people got it, those two people would check with each other to make sure they arrived at the same conclusion and then they would help the rest of us.

The students worked this way for both individual assignments, as was the case with the two quotes above, and group assignments (with shared grades). For example, here is one student's description of working on homework for which the students earned a collective grade: "When we do it together, we'll look at the problem, read it, and then

we'll say, 'okay, this is what we're going to do.' And then we both do it. That's helpful, so you don't turn in incorrect things." Here's another:

The homework was group homework, we'd all work on the same question at the same time. Say there's ten questions. Number one looks hard. "Let's see if we can figure this out." Somebody figures it out, or maybe two or three people figure it out at the same time. Those people will either give hints, or say, "no, just do this one thing," to explain to everyone else. Then we move on to number two. Sometimes if we got stuck on a question, we just skipped a few questions. For example, we'd go to number five.

While the examples above are from students permitted work together, they described the same processes for unpermitted work. Here's one describing academic dishonesty:

We would each start working on it. As we were working, one of us would be, "oh, I figured out this problem, let me show you," and another would be like, "I figured out this problem," and another would be like, "I'll go ask the [teaching assistant] about this one for us."

**Independent and collaborative work.** Finally, in the collaboration in which students described being least engaged, students worked independently, in separate physical spaces, and then shared, referred to, and completed work collaboratively. The students provided many examples of this. Here's one from a group engaged in permitted collaboration:

I have a classmate who, whenever we have a test, we go through the material on our own. We try to cover all the material, the chapters on our own. Then we come together once we've done that. We come prepared with questions and then we review everything together. If I am missing information, she will fill me in and vice versa.

And here's one from a group that was engaged in both permitted and unpermitted collaboration:

We would meet up and we would look at how we each solved each of the problems. Then, essentially share solutions. ... It was never any good to just copy each other's solutions down, because then we wouldn't understand how the problem works. [Instead] we would look at each other's work, ask questions, and make sure we understood what each other was doing.

Also, in some cases, students worked collaboratively first, and then independently.

Here's a student describing this:

We started the homework together instead of by ourselves. It was better that way. After our meeting with each other, we did the rest by ourselves. But, we could continue to ask each other: "How do you do this problem?" We talked about it by phone and by text.

The students also used technology to get help from others after completing the work independently. Here's an example of permitted collaboration:

On a daily basis, I'm collaborating with the students in my class over these [major field] homeworks, and it may not be face-to-face. It may not be, "oh, let's compare each answer." But if I have a question over it, I will text and say: "What does this mean? How did you do this? This is how I did it." I send a picture of it. They'll send me back a picture of theirs and we'll compare it that way. That's definitely really helpful.

And, here's another student talking about using technology when collaboration was not allowed: "We would scan our homework on to our laptops and send them to each other. That way we could see how we each worked out the solutions. It just really depended on the week, if we met." As indicated in this student's quote, and as was the case with other collaborative work structures, sometimes scheduling conflicts made it difficult to meet in person. Here's a student talking about completing work independently, prior to collaborating, due to scheduling difficulties:

A lot of times, because all of my friends are full-time students with part-time jobs, it's really difficult to find the time to do things together. A lot of times it's doing



it separately and then comparing it later. But it's consistently comparing, collaborating on the homework and the exercises.

**Subgroups and student roles within teams.** Davidson (2002) indicated that collaborative teams often coordinate their work by dividing into subgroups, and I also found this to be true with the students I interviewed. This was particularly true of the groups working on projects, papers, and presentations which were completed over time (all of which were permitted). In most cases, subgroups were formed for specific reasons. In addition to convenience or efficiency, the most common were students' expertise or attributes.

*Student roles based on expertise.* The students' division of labor and/or their roles within a team was often based on each student's knowledge or experience. For example, here's one student, explaining: "My specific role was background knowledge and making the PowerPoint deck, doing a lot of the company analysis, identifying 'this is what the company should have done.' But we all needed other people's opinions to do our work." The students shared the process by which some of these roles were identified. For example, here's one student talking about a team for a significant, major-specific project:

We were a bunch of [field of study] students so we were sponsored by this company, it was an [industry/field of study] company and they wanted us to work on [assignment]. Each of us had different specializations in terms of [field of study]. ... Basically we had a bunch of different skills and we didn't fully know the other person's skills which means we wouldn't be able to do their work for them. In that sense we had to work together. We had to make sure the other guy actually was able to learn the things he had to learn.

These roles were often stable within groups throughout a semester or over multiple semesters. Here's an example, from a long-standing study group:

Most of what we were doing was analyzing [field of study] and we all had different skills. I was very good at [skillset], very similar to what I will be doing in [my career]. I did that along with another girl. Another two people worked on the [industry topic], how to [answer one question]. They had an intense knowledge. We all knew each other pretty well, and that made it really easy. We knew what we were good at. In the first project, we jumped into roles that stuck for the rest of our time together.

Nevertheless, there was some fluidity to roles. Here's one description:

In terms of what we each did for our assignment, if we knew a specific topic more than the other person did, we would go ahead and work on it. Then other people would give their input, or remind everyone what they heard in class. But then, usually, there's that one person that knows that problem, like he knows it like the back of his hand. He'll kind of lead that, or she'll leave that. For the harder ones, where no one really understands it, we work together at piecing it out.

Also, sometimes students' expertise led a group to split off from the rest, but only temporarily. Here's a student talking about a group that primarily worked collaboratively:

We hated splitting up work and working apart, because we were constantly bouncing ideas off each other. The one exclusion from that is whenever there were people were doing [task]. There was a group of us who didn't need to be there for that. They would sometimes say, "it's easier for us to do this two hours tonight and bring it to the meeting tomorrow."

*Student roles based on personal attributes.* The students also talked about roles and responsibilities based on personal attributes. For example, here's one student describing roles within a pair of study partners: "She was very good at connecting what [the instructor] said to what happened a long time ago. I was helpful in terms of relating what he is saying to how we're living now." And here's another student's description of a long-standing study group:

We each bring something to the table. I'm the logical one, like, "what would we do in real life?" My friend, we call her "the auditor," because she double checks everything. We're all, "just submit it!" and she's, "come double check my answers!" Then we've got my other friend, who is the one that's efficient: "Let's

get it done.” He keeps everybody on task. It’s a personality thing, why we do certain things the way we do them.

Students also created subgroups when someone wasn’t pulling their weight. A smaller group of the committed students would move on without the person or people who are not engaged. Here’s one student’s description:

We came to the reality that he’s not going to be a reliable partner and most likely we’ll probably not work collaboratively. We gave him a smaller role so that even if he didn’t do it he wouldn’t affect us. I was really thankful for the other member, the girl I was with. We had to do a lot of research, make sure our PowerPoint looked good, and practice how to present. To be honest, I did feel like the two of us had collaborative learning.

**Planning and organizing collaborative work.** Students also used cooperative skills and techniques to organize, prepare for, and structure their work and time together.

For example, here’s one student’s description of organizing a team:

First, I reached out to different people. I was like: “Can you do this for me? Can you do that?” Then we created a Facebook page so we could communicate and give each other schedules, when we were free. Basically, it was designing roles: “What do you feel that you can do? What can you provide?”

Here, another student talks about planning and managing a project:

We had to make sure that we would meet all the different deadlines so that we would be able to finish the project on time. First, we had to get organized, figure out what the different parts of the project were and how long each part would take. We had to figure out what we had to learn in order to do it, and what type of preparation we would have to do. This required us to constantly email each other. It required a lot of communication, a lot of keeping each other committed to meeting deadlines.

In the first of the two examples above, the student is sharing the process of recruiting other student participants for an assignment. In the second, the student is describing the start of the collaborative process toward a shared deliverable. As in these cases, the

students' projects often required the groups to make multiple decisions together about how they would go about their work. These processes were a part of both permitted and unpermitted collaboration.

### **RESPONSIBILITY AND ACCOUNTABILITY DURING COLLABORATION**

Individual accountability and responsibility are demonstrated in various ways in collaborative groups. Davidson (2002) gave examples such as students maintaining their own records and accepting feedback from classmates. For my study, I looked for instances of students taking responsibility for their own and others' learning and their expectations that their team members were doing the same.

**Responsibility for own learning.** One thread that ran through all the interviews, to varying degrees, was the students' desire to learn. All the students I interviewed expressed a belief that learning was the goal of collaboration. For example, here's one student describing why he/she works with others: "Usually, when collaboration happens, it's because, I need somebody else to help me with the problem, because I can't do it on my own." Here's another:

For me, working with other people has helped me understand things at a better level. We know the professor has a PhD or something and so his level of understanding is way up there. We have to bring it down to our level to piece through that.

And, here's one student talking about knowingly engaging in unpermitted collaboration:

If you ask some people to look over what you did before you turned it in and you look over theirs and you work with each other to get the best answer, that way you will learn better. I don't see that as cheating. I think that is collaborative learning and I think there should be more of that.

But when talking about homework problems and exam preparation, several students also spoke of being wary of collaboration that didn't lead to learning. Here's one student talking about a collaborative partner:

I liked working together with her, because if one of us had a really difficult time with the assignment, the other person could go over it with them and they could redo it. But we tried not to ask each other too many questions, because we want to learn the material too.

While only a small number of students talked about collaborating on exam reviews, almost all the students who worked on homework problems also saw that work as test preparation. Here are three students' thoughts regarding permitted collaboration on this type of work:

- We have these individual assignments that are worth a large percentage of our grade and it's important that you learn how to do it on your own for the exams.
- If you only understand half of the homework then you're screwed for the test.
- It's important that you learn how to do it on your own for the exams. If you're sucking on the exam, you're collaborating too much.

And here is a student describing homework similarly, on which a group worked collaboratively when it was not allowed:

There were probably 12 homeworks, it was one a week. That made up a large chunk of our grade. The test questions would be more complex versions of the homework questions. The tests were absolutely ridiculous. You had to have some basic level of understanding on the homework to even hope to do well on the tests.

Finally, here's one student's description of his/her desire to both get a good homework grades and be prepared for the test:

Thankfully, this last semester of [field of study], if you got it wrong, [the instructor] doesn't deduct points from your grade. But we still wanted to get it

right. We wanted to get a good grade, but we also wanted to learn how to do it because the homework is quite similar to the test.

In addition, several students expressed a belief that their classmates were also striving to learn. “I cannot remember anybody I knew who’d copy the homework, because you wouldn’t get it,” said one. Nevertheless, we shouldn’t underestimate the students’ desire to get good grades:

There’s something strange about [this institution] where everyone assumes responsibility for their academics. People actually try really, really hard not to fail and it gets crazy to a point where there are panicked conversations with professors. All the groups that I’ve been in, everyone tries really hard not to fail.

**Responsibility for others’ learning.** The students also talked about their obligations to one another when it came to learning and grades. For example:

We weren’t responsible for each other’s grade, but if someone in that group did badly on an assignment I would have felt responsible. I think that happened a few times. There were things we didn’t talk about or didn’t go through. Then someone did a little worse than someone else, and it’s like, “I should have walked through that with you,” or “I should have taken more time to do that.”

One commitment several students discussed was being prepared for meetings. Here’s one student’s personal goals:

I want to be accountable and I want to have people rely on me. I want to be the reliable one. I pride myself on being able to be places on time and to get things done on time and being really efficient about it. That obviously goes into my homework and my work with other people, because I don’t want to show up and be, “okay, I needed to do all of the problems,” rather than being prepared with the five we were going to go over today and then they end up sitting there while I do it. It’s not fair to them, and I wouldn’t appreciate it if they did that to me. I make sure to be reliable and get my stuff done on time, so that we can work efficiently.

Another student explained that, “I really feel like I have to come prepared so that I can help her as much as possible because I know she is trying to help me as much as possible.” The students expected the same from their teammates:

As long as people are putting in work then I’m happy. Everyone needs to put in the work to make sure that the goals are met, instead of being freeloaders. I try to put in the work. I try to make sure that I contribute to the group. I’m not a freeloader.

“I will try to give as much as I’m taking. It’s dynamic, how much you give and how much you take,” explained another. These students expected others to be prepared, follow through, show up, and try to do their best. Here’s one student’s description of his/her expectations for others:

I fully trust the people that I work with to do what they’re supposed to do. We all care about our grades. We all care about what we do, and finding that end job—the end goal for everybody’s education. In the end, you need to hold yourself accountable.

As reflected in the quotation above, the students expected their teammates to be self-starters, and to meet deadlines, and attend meetings without reminders. Here’s another student, talking about a long-standing work group:

I’m not going to micromanage people. I know [student name] isn’t going to do it until the night before. So I’m not going to text him three days before and say: “Did you do this? Did you do it? Did you do it?” I know he’s going to get it done. It’s a mutual trust between one another. But if one of us didn’t get it done, then things would probably change. But we’re all mature, we know how to work together. You know that you have certain things that you need to get done in order for the group to be successful.

Nevertheless, the students also understood the need to be flexible. “There was a sense of trust like, ‘okay, everyone is going to contribute however much they can,’” said one, who went on to say that there was “a very deep sense of understanding whenever someone

was having a really difficult week and could not contribute,” and, “it was really nice to have a very understanding group that was willing to be flexible with my personal needs and then I would be flexible with theirs.”

Even within this dynamic of expectations coupled with understanding, many students were worried about doing their part. Here’s a student describing one group’s collaborative process: “I would do some questions, somebody else would do some questions, and we’d check them together.” Then he/she went on to say: “I felt like I needed a lot more help than other people.” Here’s another student expressing similar fears:

I always felt like I was leeching off everyone else, although I tried to contribute as much as I could. There are some concepts which I understood that other people did not understand, or at least I understood differently. Whenever I could explain something, I would. But, I hope I wasn’t explaining something when some dude didn’t want to hear it. That’s just being the annoying person.

Most students seemed to know that their self-doubt was not unique. “It’s important for this generation, or people in college currently, they don’t want to be the weakest link. They don’t want to be the one bringing people down,” explained one. Some shared concerns about maintaining standing within this culture. Here’s how one interviewee described the possible repercussions for not doing your part during a group project:

Even when the project is over, you know it’s going to affect your reputation in some way. I personally am always going to deliver what I say I am. To the best of my ability, it’s going to be there. You know, I’m going to see those people after this project is over.

And yet, the students expected others to be honest about weaknesses: “If you don’t know how to do something it’s much better to be honest about it rather than try to hide your



flaws or your failures because that can end up definitely delaying these projects by a long time.”

**Holding one another accountable.** Despite their expectations, teammates didn’t always follow-through. One student told me that, “very rarely have I seen a group of people that there’s that one lazy person that just gets answers. I know my friends always talk about that one person, but I’ve never actually met someone that has done that.” But that was only one in 12 students who didn’t encounter challenges with working with classmates in teams. In some cases the issues were minor: “I don’t think there was ever a point where we got very mad or upset with each other. I think we were respectful of each other as much as we could be.” But in other instances, they were significant.

***Working through conflicts.*** Based on the stories the students told, most conflict within groups was caused by individual students’ behaviors. But there were, on occasion, deeper issues. More than one student told me about teammates who were struggling with non-academic issues that impacted their contributions to group work, and the interviewees had empathy and patience in these cases. For example, here’s a situation one student shared:

One of the [two] people [on the team], she was struggling with a lot of mental health issues and had a lot of stuff going on in her personal life. She could not contribute as much as I could. That was a little bit frustrating because I would be the one that would type up the entire assignment, for example, and send it in. She would, of course, apologize. At the same time I’m like, “I need to be understanding about this, because she is dealing with issues that I am not.” So I told her, “that’s okay, we’ll work through this.” But the other girl we worked with, she actually ended up taking on more work than I did. I’m sure there was a time that she felt frustrated.

Again, the students also expected their work relationships to be fluid, and they were willing to pitch in for their classmates. Here's one student describing work on a large project:

We were incredibly stressed out. I think that helped us maintain a sense of responsibility and of respecting everyone, and understanding that everyone in this group is stressed. There were weeks where someone did way more work than the other. But you know it was never that the person was lazy. It was that person was having a really busy week and they couldn't contribute. But there was never a weak person in this group who was, "I'm not going to contribute at all." There were always weeks that different people contributed.

Here's another student describing this: "Each person was pretty equal in terms of responsibilities, but each person had their own thing going on. One girl would be really quiet throughout the week and then in the last minute she would be, 'I figured out this problem.'"

That said, the students didn't tolerate team members who didn't do their part. I heard more than one story about students "dropping the ball." Here's one example, typical of what the students reported:

We would send each other the papers and the paragraphs to revise and edit, to make sure it was okay, and that it was the correct information to put in the paper. She never, ever sent hers. We had to pick up the slack.

Other actions that undermined learning were also not tolerated. Here some students share experiences and their reactions:

- If someone is not doing their work and if they don't take the initiative, then it's obvious they don't really care about the work. They just want to pass the class. This guy, he wasn't very reliable. He left early during one of our meetings to go to a party.
- She showed up drunk to a group meeting once, which was like, "why did you think that was okay? Who in your life told you it was okay to show up to a

group meeting drunk? This isn't even a normal time to be drunk. It's a weekday. Why are you drunk right now?"

But, while the students were often frustrated by classmates whose behavior didn't support their team's work, there was one behavior that everyone seemed to tolerate: being late.

More than one student noted that they were often on time when others weren't, but they didn't seem to be bothered by it:

My group members tended to be a little bit late usually. I was always the one right on time. There were a couple times, where we would be scheduled to meet. I'd be waiting there for 15 minutes, and she texts me: "I'm so sorry, I can't come." That would of course be frustrating, but at the same time I am like, "I understand."

They all believed that everyone was busy, juggling multiple commitments and deadlines related to their academics. One student said, "I think a really important value is just respect of others, respect that they do have other commitments, that they might not be able to make every meeting." He/she went on to add, "they might not be able to put in the same amount of work every week." Here's another student, talking about trust, and balancing understanding and expectations:

You have to trust, when it comes to group work. Sometimes, I start getting really anxious. I feel like certain group members are not contributing. Then I feel like I need to do everything, I need to control everything so the outcome will be perfect. In this situation, there was no way I could do the entire homework myself. ... There was a sense of trust, "okay, everyone is going to contribute however much they can." Also there was a very deep sense of understanding whenever someone was having a really difficult week and could not contribute. It was really nice to have a very understanding group, who were willing to be flexible around my personal needs and then I would be flexible about theirs.

When team members were truly disengaged, a few of the students I talked to were willing to confront them. For example, here's one student's response when I asked about how he/she would engage with a classmate who didn't do their part:

I'd ask them if they did their work. If they did it, great. If they didn't, then, "why didn't they you do it?" If it's, "oh, I went out, and I didn't get back until late," that's not an excuse. If you had to go home because your mom was sick, then that's a valid excuse. If you want to screw up your own grade, if you want to screw up your education, that's fine. But don't bring other people down with you. Your boat may be sinking. I'm going to throw you a life jacket. Whether you take it or not is your decision, but don't throw water into my boat trying to sink me too.

Several students also shared experiences with reaching out to an academic leader for help. But they didn't take this step lightly. For example, when I asked about making ethical decisions in college, before we ever began to talk about collaboration, two of the 12 students described struggling with whether to tell a faculty member about a student who wasn't doing their part. Here's one example of a student talking about going to a teaching assistant:

We told the TA: "Hey, she hasn't been coming." We felt the need to tell. We didn't want to pick up [the student's] slack, and she'd get the grade for it. It wouldn't be fair if someone got what we worked for.

The student continued on, to be sure I understood that the decision to ask for help was difficult:

I'm trying to articulate this in a more specific sense, in a way that you can understand this. Because she didn't do what she was supposed to do, it made us feel like we were accountable to do it. We didn't want this to affect us. This is our grade, too. This is our class, too.

The student went on to tell me the unspoken message the group had for the student:

"We're actually putting in the work and you're not here. You're expecting to put in the most minimal effort." The student said they eventually also told the professor, and shared the professor's response: "Oh yeah, we're already keeping an eye on her."

Nevertheless, it was unclear to the student if or how the faculty member adjusted the grades of any of the students.

There were also, in some cases, challenges with groups due to misaligned skill-sets. Here is one example a student shared:

One of the girls was horrible at writing. We learned that the hard way. We gave her a substantial writing portion of one project. Me and one of the other girls in the group had to go through and edit the entire thing. Then we knew she shouldn't get large writing portions. We didn't tell her that. We would assign roles strategically. It helped, what we knew that about each other. We tried to avoid hurting people's feelings by telling them, "you're not good at that." But the rest of the group knew.

This lack of reciprocity could lead to resentment: "The person I worked with, she wasn't that strong in [topic]. Sometimes I put in more work, because I had to help her." Some students talked about abandoning their work with a team member when the person was holding them back. These students talked about making difficult decisions about working with a student when the work wasn't shared. For example: "I felt that it was too much, that I was helping her more than she was helping me. I had to draw the line." One student also talked about how a group would manage a situation where a student was struggling, one who didn't have the understanding needed to do their part toward the group's work: "If you're there and you're falling behind, they will help you to a certain point. But if you're really way, way behind, go to the professor, because you're holding everybody back. Unfortunately, that's how it always ends up." When I asked the student about whether a struggling student can or does return to a group when they've caught up, the student said that hadn't been his/her experience and explained: "I feel like they feel

too intimidated to come back. They could, but there is that sense of, ‘they’re way too ahead of me. I’m going to slow them down. They already rejected me in a way.’”

*Working with friends.* Several students also talked about the unique joys and challenges of working with friends. While they mostly enjoyed it, it did add additional pressures. For example, one student told me: “I learned a lot about working with friends, being patient and pulling your weight and being responsible, because when you’re working with people you don’t know there’s not as much pressure.” Another said: “When you’re working with people you’re very close with, sometimes you have to say things that you don’t want to say to a friend but you wouldn’t mind saying to someone you didn’t know.” One student shared a complicated story about being let down by a long-term friend within a group made up of friends. It was in a course that was the first in a two-course sequence, and the students typically stayed with their work groups for both courses. Instead, the student I interviewed chose to take the next course out of sequence, rather than move forward with the same team. He/she was concerned that working together another semester would end his/her friendship with one or more in the group. Another student shared the following, about a group in which tensions arose due to a friend:

She slacked off. She didn’t do great work. I think she took the easy way out. The rest of us knew it. We had a meeting to talk about how to deal with it. Originally, we were thinking about kicking her out of the group. I did not care. Neither did another girl. The other guy in the group was very adamant. He did not like working with her. He hated the stuff she did. I understand. If I didn’t like her as much and I was a less patient person, I would have been [clicked fingers] “bye.” This is someone who I had been friends with since day one of college. We all knew each other. We all studied abroad together. We had worked together before. There were no surprises, except what a surprise it was that she was pretty bad. It

ended up we talked to our professor about what our options were. I think [the professor] actually lowered her grade in the class. I rated her kind of low on the evaluation. The other guy graded her really low.

*Group evaluations.* As in the example above, the students often had to evaluate one another, knowing that input might influence another student's grade. More than one student talked about having to decide if and what to communicate with a professor about a team member who did not do his/her part. Here's how one student described it: "How do we approach it? Is it the right thing to give her a worse grade, or do we lie and say she was okay just so we can get a better grade or because we like her?" Here's another student's description of completing evaluations on classmates:

With group evaluations, I've done so many where I said someone was better than they were because it personally makes me want to throw up to say someone was bad at their job. I know they are going to get a worse grade because of it. You want your friends to get good grades. That's been something that's been interesting to navigate.

The students I spoke to were reflective about their experiences with their teams' cooperation around learning, regardless of how well it went. "It taught me a lot about responsibility," said one student, "especially dealing with the girl who was not responsible, and being a good group member, and what can happen when you're not." And, despite challenges to working together, in most cases, the students enjoyed it. As one student said, "it was really nice that we could ask each other for feedback. I was really nice to have a partner." In addition, many of the students talked about the role of effective communications in support of group processes and cohesiveness. As one student said, "I think for a group, the major thing is communication. A lot of times different issues arise because the group was not able to communicate effectively."

## **POSITIVE INTERDEPENDENCE AMONG STUDENTS DURING COLLABORATION**

Students working together can come to believe that each team member's contributions are unique and indispensable, and that each member of the team can only reach his or her goals if the other students with which they are working also reach theirs (D. Johnson et al., 2007). Students' transition to this way of thinking—from self-interest to mutual interest—is the key to interdependence (R. Johnson & Johnson, 1994).

Through interdependence, said Stahl (2006), the students collaborative work results in new, shared knowledge. Therefore, for my research, I looked for students' expressions of their belief that all a groups' members' efforts were needed for everyone to excel. Here are some examples from the students I interviewed:

- I believe that I will only be successful if everyone else is also successful. There's no way I am getting it by myself.
- It was a really good group. People were willing to explain things. I was confident of their knowledge if I felt my own was lacking. I would say we worked in tandem.
- I need to scratch my group-mates backs for them to scratch mine. We all wanted each other to do well. We all wanted each other to pass this darn class.
- Together, we were mostly able to finish the darn homework, and turn in something comprehensive.

Here is another student, describing a class in which he/she collaborated when it was not allowed:

Everybody else is relying on you, as well as you're relying on them. We all needed to be able to understand the mechanisms, and all the equations, and whatever else is involved that was so awful about taking [the course].



All the students described these types of reciprocal relationships, that were focused on shared learning within a group. Here's one student's description of this phenomenon: "It was, 'I want you to do better, because I am the one helping you,' and vice versa." Within these relationships, students wanted to do their part:

There were weeks where I would say, "I don't have time." I would feel bad about it, because those were the people that helped me. It's weird because there is no set-in-stone commitment to the group. But there was almost like a social commitment to be there for the people who you're going through this awful class with.

**Outcomes.** The students I spoke to were also proud of the outcomes of their shared work, and many stated a belief that collaboration improved both their learning and their grades. Some also described a positive shift in attitude toward the class, topic, or their higher education experience, due to their work with a team.

***Quality of work and improved grades.*** All the students I talked to expressed a belief that collaboration had positively influenced the quality of their academic work. The students attributed the value of their teams' output to several things, including higher group standards than their personal standards, the added expertise of their classmates, having someone to check their work, and increased collective time on task. Here's one student:

If I were on my own, the work would not be as high quality. My two partners are very meticulous. They don't settle. I would settle sometimes. Even when I would feel like the work is adequate, they would reread it and check over it again maybe one or two times, and make small changes. And, let's say we all spend about the same amount of time, maybe six or seven hours working on the lab, combined that's 18 or 21 hours. Even if I had more time, I probably wouldn't be spending 18 or 21 hours on it my own.

Here are two additional examples of students' beliefs about the quality of the output of their collaborative groups in comparison to individual work:

- I think if I had done it by myself I would have put in a lot more work. And I will compromise but my group will not. I am not quite sure what the outcome would be in terms of the final grade but in terms of the final products, the presentation and the paper, I think the quality would have been the same or maybe a little less just because others had an expertise I did not have.
- Doing it on my own, I'd make a lot of mistakes and I'd practice it incorrectly, and then that would force me to get it wrong on the exam. But being able to collaborate with other people solidifies it in your own mind, that you know what you're doing. It solidifies the concepts when you're iffy. It reassures you in what you know and corrects you in what you don't know. Then that way you can continue forward knowing that you're on the correct path.

The students' belief that their collective effort created better work product was particularly true for projects, papers, and presentations. As one student said: "If I was doing it individually, I would have to spend more time than we spent collectively to do it as well." Here is how another student explained it:

Maybe I could have done the project [individually], it probably wouldn't have been as good and definitely would have taken longer because I would have to do a lot more research for the different parts of the project [done by team members].

The students also believed the increase in their learning was reflected in better grades. For example, one student said: "I learned a lot more, obviously. I got better grades, clearly. I got better grades and learned more, definitely, because someone was checking my work." Another said: "We work well together. Both of us are really happy about the grades we've been getting."

***Learning and attitudes about learning.*** Most of the students I talked with also felt they learned more through collaborative work than through individual work. As one

student said about team work in a major-specific course: “I’m grateful I learned [the topic],” and, “I’m better at it because of the group.” Here’s another student:

I learned so much, especially about things I wasn’t good at. I learned so much in that class. I became a much better student for being with students who were better at [field of study] than me. I also think the other people in my group learned a lot about [task], because that’s something I’m pretty strong at.

Some of the students’ collaborative experiences also had a positive impact on their attitudes about their coursework. Here’s a student talking about working with the same partner on two different courses: “For the [class 1], we would talk about it, and I felt both of us ended up being really passionate about it. We could definitely connect a lot of our past with the things that we were learning in class.” On the other hand, “for [class 2], it was very much more, ‘okay, let’s get this [grade of] C. Let’s do this.’”

## **SUMMARY**

In this chapter, I provided a detailed look at the information the students I interviewed provided regarding their experiences with collaborative learning on homework. My goal here was to answer the question: How do undergraduates describe their experiences with collaboration with classmates on homework assignments, whether permitted or not? In the next chapter, I’ll focus on how unpermitted collaboration happens, or the answer to my remaining research question: How do undergraduates describe the situations that influence their engagement in unpermitted collaboration on homework assignments?

## **Chapter 6: Undergraduates' Engagement in Unpermitted Collaboration on Homework**

My purpose with this chapter is to find the answers to my final research question: How do undergraduates describe the situations that influence their engagement in unpermitted collaboration on homework assignments? To do so, I'll discuss the students' experiences with academic dishonesty at the institution, look more closely at the learning behaviors the students described participating in when working together, and revisit the students' stories through the lens of moral development and goal orientation theories.

### **CULTURAL ASPECTS OF ACADEMIC DISHONESTY**

I will begin my exploration with the stories the students shared about their experiences with academic dishonesty at the institution. This includes theirs and others' engagement in cheating.

**Observations of academic dishonesty.** All the students I interviewed were aware of others' cheating, and most had seen it. One student shared this example, from in-class exams:

The tests are nothing like we learn in class so you're all worried before the test. You have tables of four, so you can easily look at all four [people's papers]. People will do that. So, I cover my answers.

He/she went on to describe the tests: "I definitely failed quite a few of them, but I'd rather fail knowing I worked real hard, than pass knowing I copied off someone." In addition, more than half the students described observing and/or participating in ongoing cheating within a collaborative group, in particular between students who shared an affiliation through an academic program or unit. Here is a student talking about his/her experiences in courses in his/her field of study:

A bunch of people cheat here on campus. I hate that. I really hate that. They're like, "I see you finished that assignment, do you mind showing it to me?" I can't stand that. I always feel bad because they're friends, and I'm like, "Yes, I want to help you, but I can't send this entire document to you with all the answers."

The students also talked about collaborative cheating on out-of-class (take-home) tests and, in some cases, described large numbers of student participants. For example, this story about a final exam:

Everybody was in the library, everybody in the class, working together on the take-home test. I was there studying for a completely different test. Eventually, I had to leave because they were just talking too much: "Oh, what are you going to write for this? What are you going to write for this?" I was like, "Yo, bro." I already finished mine. I had two exams that day and I didn't want to have to worry about writing that whole thing while I'm studying for another final.

**Opportunities for academic dishonesty.** All the students also shared at least one story about having had an opportunity to participate in academic dishonesty. While most of the students I interviewed had participated in academic dishonesty, they had all declined most of the opportunities they had to cheat. For example, this student decided against it in this instance:

There was a study group that organized on Facebook that met on Monday nights. I hadn't gone because I didn't think it would be useful. Then after our second exam, I came to find that they were able to get a lot more information than they should have been getting for the exams. That's how some of them were able to perform well. I ended up not joining them. That was something that I had considered doing, to join that group. I decided not to do that. I feel if you're doing that, you probably shouldn't even be a [field of study] major in the first place. Go pick something else.

As another example, in Story 27 (in Table 5.7), the student worked with others to prepare for a test, believing it was permitted when it was not. After discovering he/she had been cheating, the student declined future opportunities to work with the group. In addition, in

another story, a student who worked in the school's tutoring center told me he/she often felt pressured to help other students too much. He/she did not bow to that pressure, believing it was not in the students' best interest:

When students come in and want you to do their homework, I'm very strict: "No, I'm not going to do your homework for you." This one girl came in, clearly sick with the flu, and she had this homework due that night. "I haven't started it. I'm exhausted. Please help me." I came over: "What can you do here?" She starts crying. She's like, "I don't know what to do. I just want to go home and sleep." You feel so bad that you just want to give her all the answers so she can go and rest, but you can't. You need to help others without boosting them up without their own hard work.

Nevertheless, most of the students did participate in cheating and some talked about routinely collaborating on homework when it was not allowed. For example, in Story 23 (in Table 5.6) the students had an opportunity to cheat on their homework and took it. They were given a chance to make copies of graded homework from a past semester, did so, and then used the information they received when working as a collaborative group—and without telling the other members of the group. In this and other cases, the students discussed the opportunity, including that they would be cheating if they accepted, and decided to take advantage of the situation. Another example of this is Story 22 (also in Table 5.6). In that case, a collaborative group discovered their classmates were using an unpermitted database of past homework and test questions, discussed it, and decided to use it too.

In contrast to most of the students' behavior, all the students talked about being opposed to cheating. In addition, several of the students talked about declining to help others who asked for answers to homework or help with other shortcuts on assignments.

Here is a student, for example, talking about being a part of the first group to present a final project, and then receiving requests for help from groups presenting after them:

Some of the other groups were asking where we found certain things. We gave them some of the websites, but we're like, "Hmm, we did our assignment, and it's your turn to do your assignment. We spent six hours doing it. We're not going to let you get off doing one hour and then you get five hours of Netflix."

He/she explained that the group discussed the requests they had received and decided not to share. However, the student was not sure if that was what had happened. About his/her teammates, the student said, "I don't know if they sent it to them later on. They could have. But I said "no." Several students talked about this—navigating being asked for help by classmates when helping would be academic dishonesty—including their beliefs about the boundaries for requests help. Here is what two students shared:

- You can't just say, "What did you get for this?" If you're all independently graded, it's not okay to say: "Give me your answer. What did you get for that?" You should want to know how to do it. Even if you don't care about it, you're supposed to say, "oh, how did you get this?" That's the right way to ask: "What is the answer to this question?" That's an acceptable way to ask someone for help. "How did you get this?" You have to be respectful of the effort someone put into something.
- Whenever somebody crosses that implicit boundary and just tries to copy your work, you kind-of just look at them funny, and then you don't talk to them. You might let them do it that one time, but then you don't talk to them for the rest of the semester, because you realize they're not trustworthy. ... People will say, "Don't work with this guy. He is just going to copy your work."

However, for most, the boundaries shifted when friends, rather than classmates, asked for help. Most of the students I interviewed in said they have and would ask friends for help, and that it was okay to do so. Here is a student, for example, talking about working with a friend with which he/she had cheated in multiple ways in multiple classes:

There have been times where I had a rough week. This happens to everyone. I do as much homework as I can. Then I tell my friend, “can you just send me a picture of what you did for these three so I can write them down? I’ll learn how to do it later.” Those are things you ask close friends, because that’s okay to ask a close friend.

Most of the students talked about actively engaging in decision-making when given opportunities to participate in academic dishonesty. Most of the students described having negative beliefs about students who cheated and many talked about being offended by some of the opportunities to cheat that had been provided to them. For example, one student who took part in unpermitted collaboration, also talked about being surprised by an offer of payment to write an essay for a take-home test: “There was a situation, it made me very uncomfortable because one of the athletes, I think they hire people to do their work. I didn't know people did that.” The athlete, the student said, told him/her, “It's normal. I'll pay you, or I'll just take you out to a nice dinner.” The student indicated his/her response was: “Thank you for the offer, but no. Please do your own work. You're smart. You got here. Show your potential.”

**Accusations of academic dishonesty.** Two of the students had been accused of cheating on tests, and both said they had not done so. (One of the two was also involved in unpermitted collaboration on homework but the other was not.) One was accused of helping another student:

I was taking a test, and I didn't realize that the person behind me was looking at my paper. It was an athlete, who was looking at my paper. [The instructor] called me in. Our answers were similar. ... She told me about the situation, and was like, “are you aware of this?” [She was] basically saying that I was helping. I was just like, “I don't know what you're talking about. I don't even know what this athlete's name is. I don't know who you're talking about.”



The faculty member gave the student two options: “You can report him or I can give you both a zero.” The student struggled deciding what to do:

I felt like she was siding with the athlete because if he were to get caught cheating he would lose, I don't know, something with football, or whatever. ... It really hit home for me, “Do I tell? Do I not? Does it really matter?” I just didn't want everybody to hate me. I worry about how people view me.

The student decided not to report the student who had copied his/her work on test and earned an “F” on the test instead. The student was still angry with the professor, because, “She didn't want to tell.” In hindsight, the student said: “Do I regret it? I don't know if I necessarily regret it. I wouldn't have even known if [the faculty member] hadn't told me.” All the student could do was sit elsewhere during future exams in that class.

The other student was accused of cheating because the work he/she turned in for a test problem did not lead to the correct answer the student also submitted:

I got called by my professor and undergraduate adviser for an accusation of cheating on a test. It turns out that I got the right answer by doing it the wrong way, and then the grader couldn't understand how I got that answer. I got the right answer somehow, but the work was completely wrong. Somehow it worked, I just plugged in a number and somehow it got the right answer. It turns out, it wasn't the right formula, but it gave me the right answer anyway.

The student talked about his/her decision about what to say: “I decided to just stick to the truth, and let whatever happens happen.” He/she also described the experience with university's judicial system:

It was like a prehearing type of thing. I didn't cheat, but at the same time I wouldn't have lied about. I think I got an email. [The] hearing was scheduled for Wednesday or Thursday. I had class [before] that time with that professor. It was awkward. I was like, “What if they really don't believe me? Am I going to just say that I lied so I get lesser punishment, if they don't believe that I'm telling the truth, that I didn't cheat?”

At the hearing, the student showed the professor how he/she arrived at the right answer with the wrong formula and the professor believed it. The student went on to say, “I think I got an F on that test, not because they thought I cheated, but because I just didn't understand the subject.”

**Breaking other university rules.** Two students, both of whom took part in unpermitted collaboration on homework, also described knowingly breaking other university rules. One used a position of trust—a job in a university office—to access and share another student’s private information. Here is the story he/she told:

I can describe one example where I wasn’t ethical, but I think I did it for a noble cause. I don’t know. You can be the judge. One advantage I have is I can look up people’s test scores, and letters of recommendation, and essays. I’m not supposed to, without permission, but everyone in [the] admissions [office] does it. One guy was telling people he had a perfect score on his SAT, and one of my friends was like, “he so didn’t.” I personally did not like this guy. I think he is a pathological liar. This is just a decision I made: I had to know. So, I looked it up, and I was like, “You did not.” He did not, and I don’t really feel bad about that. I don’t feel bad about unearthing the truth, even though I technically wasn’t supposed to.

The other student used a prop gun for a school project, when firearms (even fake ones) are not allowed on campus without prior approval. The student knew the rule, but said there was not time to ask for the necessary permission and also complete the assignment on time.

**Collaborative cheating and cheating on homework.** All the students who participated in unpermitted collaboration on homework also participated in unpermitted collaboration on other types of assignments or other forms of homework cheating. This is illustrated in Figure 6.1. To summarize, I interviewed 12 students, nine of whom took part in unpermitted collaboration and/or cheating on homework and, of those nine, seven

participated in unpermitted collaboration on homework. Here is one example, of a student talking about working collaboratively on an out-of-class final, when it was not allowed:

It was a take-home test at the end of the class. It was a [physical education] class. You're just playing basketball. Me and my friend, we were in this class. He's my friend outside of class too, it's not like we became friends in the class. ... The Internet was allowed, as a resource, like an open book test. It was an open book take-home test. ... We would send each other links of where we found the answers. Technically, it wasn't allowed.

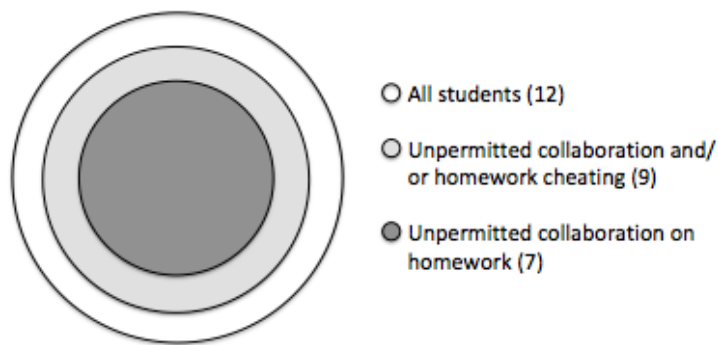
Other students described getting help from others on homework, but not collaboratively, when it was not allowed. Here are three examples:

- My stepmother knows [the topic]. There would be cases where I would send something off and she would check it for us. I felt it was too much, so we didn't do it much.
- I was sitting at a table where a lot of [subject of the course] majors work and a senior [majoring in the subject] walks by and says, "oh you're taking this class." He goes, comes back five minutes later with a big binder. He says, "Here's all my [course] work for the four years I've been here." Then he turns to one section, "Here's all the homework solutions for your class." ... He came back for it ten minutes later, after we'd made copies.
- Me and my friend, we would just send each other these links of where we found specific answers to the questions. It wasn't something that you would necessarily need a textbook for. Most people who have taken the class or have any understanding of [the topic of the class] would know that it's ["answer to the question."] But, I guess, technically, it wasn't allowed.

Most of the students, reflecting on their participation in (non-collaborative) cheating on homework, said they regret it. Some because they believed it was wrong. For example, "I let my roommate copy my homework," said one student. He/she asked me:

That's me breaking a rule, right? ... I feel like I'm doing a nice thing for my friend, but it's still cheating. ... It's almost like I'm not doing anything wrong. I'm helping my friend. They're doing the wrong thing, but I'm okay. I'm just giving them permission to do it.

Figure 6.1: Study participants' engagement in collaborative and/or homework cheating



As can be seen in Table 6.1, all the students who took part in collaborative cheating on homework also took part in both collaborative cheating on other types of assignments and other forms of homework cheating. In addition, two students described other serious forms of university rule breaking, both of which also took part in unpermitted homework collaboration.

Table 6.1: Descriptions of the institution's culture related to cheating, by students who did and did not participate in unpermitted collaboration on homework

The student described...	1	2	3	4	5	6	7	8	9	10	11	12
<b>Unpermitted collaboration on homework (7)</b>	×	×	×	×	×	×	×					
A culture of cheating (7)	×			×	×	×	×	×	×			
Opportunities to cheat (12)	×	×	×	×	×	×	×	×	×	×	×	×
Being accused of cheating (2)							×			×		
Breaking university rules other than cheating (2)		×	×									
Collaborative cheating (8)	×	×	×	×	×	×	×			×		
Cheating on homework (9)	×	×	×	×	×	×	×	×		×		

#### THE ROLE OF THE FACULTY MEMBER

As can be seen in Table 6.2, all the students reported that they had faculty members who encouraged collaboration, and all the students had been assigned collaborative work. In addition, all the students said they had faculty members who had discussed academic integrity with their students. In addition, most of the students said they had faculty members who discussed boundaries for collaboration. In addition, some said they had received mixed messages about those boundaries from faculty and staff members, in particular, teaching assistants (TAs). In several cases, the students who reported confusion about the rules described a disconnect between the statements made

by the faculty member on written into the syllabus, and the statements or actions of a teaching assistant (TA). Here is an example:

The professor always emphasized that our work had to be our own. We could not work collaboratively on calculations or on the discussion questions. But she said it was okay to get help at the [sessions led by the TA]. The TA sessions were always packed. There was usually just one TA and when he would explain things. Sometime we did not know if it was OK for us to explain it to another person. If the other person got there later or if the TA went over a calculation, we didn't know if it was okay to explain that calculation to someone else, because it was in a TA session. But then I also felt like we were working collaborative, which wasn't allowed. So, sometimes I didn't know if I could or not. Then I noticed that, sometimes, people would do it front of the TA and the TA would be fine with it. Sometimes the TA would tell us to explain it to someone else. I started feeling more comfortable with that.

The student went on to ask: "What if the TA session ends, but we stay after? Can we still do that? Is that still okay?" In addition, the student said, "There were a few occasions, where after the session ended, a few of us stayed and just went over the same calculations that the TA had explained It wasn't really clear." The student asked again: "What was okay? What wasn't?" The student also shared an opportunity the TA had to help the students understand the boundaries and failed to do so:

One time the TA was there, and there were two girls, one of them asked the other a question, in front of the TA. I think she asked her, "Is this how you did it?" Then the other girl, she was kind of hesitant, like she didn't know how to answer it, because the TA was there. She was like, "It feels like everything is academic dishonesty." She still explained it, and the TA was there. The TA was fine with it. The TA didn't address if it was academic dishonesty or not. But he didn't say anything so we still weren't really sure.

Table 6.2: Students' who did and did not participate in unpermitted collaboration on homework, and faculty members' and other academic staff members' communications

The student described...	1	2	3	4	5	6	7	8	9	10	11	12
<b>Unpermitted collaboration on homework (7)</b>	×	×	×	×	×	×	×					
Being assigned collaborative work (12)	×	×	×	×	×	×	×	×	×	×	×	×
Faculty encouraging collaboration (12)	×	×	×	×	×	×	×	×	×	×	×	×
Faculty setting boundaries for collaboration (9)	×	×	×	×				×	×	×	×	×
Faculty discussing academic integrity (12)	×	×	×	×	×	×	×	×	×	×	×	×
Receiving mixed messages about collaboration (5)				×	×		×	×	×			
Faculty prioritizing students' learning (12)	×	×	×	×	×	×	×	×	×	×	×	×

**Students' understanding of faculty members' expectations.** Most of the students I talked to believed they understood their faculty members' expectations regarding collaboration on homework. For example, one student said: "I never had a situation where we had to determine whether it was okay to do this or that. We usually know what's right and what's not right." Another student said, "We all know what is expected. If anybody was like, 'Oh, I didn't know,' they'd just be lying. The professor lays it out. ... The professors will always say what we're not supposed to work on together." Most of the students said that most of their faculty members took time to discuss academic integrity and dishonesty within the context of out-of-class collaborative

work. For example, here's a student talking about a faculty member's communications related to a major class project:

My professor, she literally spent almost half of class talking about cheating. She talked about her experiences in the past, where she told people not to work together. The way she said it, it seems like the students didn't understand what cheating meant, and so she had to go through a whole list of what it means to cheat and not to cheat. She talked about that experience. Then she gave us the list too. Some of those things were, like, not working together, not texting anybody, not even passively writing about it on Facebook, not helping, no communication with others except the professor. I feel like that was very clearly stated. She discouraged us from working collaboratively on that project.

As in this example, most of the students said faculty members took the time to explicitly define what was and was not allowed. Here is another student's description:

[Faculty members] always specify. They'll say, "You can work with other people, but you need to turn in your own homework," or, "Do not collaborate with anybody else on this assignment." The only assignments that they say specifically, "Do not collaborate with others," are midterms or exams that are take-homes. I had one last week. It was like, "Do not collaborate with any TAs, professors, or other students." They'll flat lay it out for you.

Nevertheless, some students still described being unsure. Here is one student, talking about the rules related to out-of-class collaboration:

[Knowing what is allowed is] something I struggled with. It's not always readily available information. It's in the syllabus, most of the time. If there's an ethical boundary or a rule that you're not supposed to break, it's going to be in the syllabus. Those are not always communicated by the professor. Sometimes you have to go looking for it. I definitely think if there was a big rule, if there's ever something like, "You definitely cannot do this," a professor usually communicated that.

Later in our conversation, this student also talked about students knowingly ignoring the rules:

If the professor does not specifically state what you should or shouldn't do in your group, I think, a group, they would maybe twist the rules or put their own rules



before the university rules. I don't know how to explain this better. Even if the professor does give out specific rules, "You can't do this. You can't do that," I'm pretty sure people will cheat. I think we all know what we should do, but then we actually don't do it. It's sad in that way even for me.

(This student was one who participated in unpermitted collaboration on homework.)

Others did not seem to take what the faculty members said seriously. For example, here is one student sharing his/her doubts about a faculty members' threats about negative repercussions for engaging in unpermitted collaboration:

"Don't do this or you will get a zero on the assignment." Has that ever happened to anyone? I doubt it. There are people who are copying, that's a different story. I think, obviously, a professor can tell if you copied someone else's assignment. I think it's hard to know that someone worked collaboratively on something, but sometimes you can.

The student went on, talking about whether faculty members care about or enforce the rules, and about personally acting on assumptions that they do not:

I don't think professors actively look for [unpermitted collaboration]. I don't think it's something that's strictly enforced. It's just so that you are a little scared to completely just do the same thing as someone else. That's been most of my experiences in instances where [faculty members] discouraged working together. You kind-of work together, you don't completely work together.

Most of the students also reported encountering situations that they believed required them to interpret the rules the faculty member had provided. In some cases, this led to unpermitted collaboration. Students talked about doing this individually or with a group. In addition, while most of the students who talked about cheating talked about doing this too, students who did not cheat also participated in this reinterpretation of the rules. Many of students who did this expressed a belief that faculty members expected them to maximize their learning, even if that meant adjusting or reinterpreting the rules to

work together when it was not allowed. Demonstrating this type of thinking, one interviewee told me that, “Under normal circumstances, the understanding is that if it's for a grade then you should do your own work,” but then went on to say that, if students work together when it is not allowed, “At least learn the material as you're working together. Don't let people copy your homework, or tests, or things like that.” (And, this was a student who did not cheat.) Here is another student, who perceived the rules to be flexible, and describing similar decision-making:

It's not completely set in stone, where the boundary is. We all have to gain knowledge from this homework. The way I see it is, if you're just copying, you're not gaining anything from doing the homework. If you ever feel like you're ever going into that mindset where you're not gaining anything, then you've crossed the line because you're copying something without getting the knowledge. Whereas if you're talking with somebody about how they [answered the question], I think that's what the professor wanted, because then you both get the knowledge.

In both examples, you will notice, the students compared collaboration, which they believed was acceptable, even when not allowed, to copying, which they did not believe supported learning. Here is a similar example:

[The faculty member] said, “I would suggest that you do it on your own, because you're going to need to know how to do it for the exam.” It's not bad to collaborate with others, it's that he wants you to know what you're doing. What I do is, I'll do it on my own and then check answers with some people. That way we correct each other. We still get a good grade on the assignment, but we're learning about it in the process.

Most importantly, in all these examples as well as others I heard, the students were reinterpreting the rules to allow for unpermitted collaboration because they believed the faculty member intended for them to learn. In addition, there were students who suspected their interpretations of the rules may not be correct but chose not to ask, so

they could continue to work together. For example, the student in Story 27 (in Table 5.7), thought he/she was working with others on homework and later discovered the collaborative group was cheating on a take-home quiz. Here is the student's description:

We had these quizzes, like take-home assignments that you do online. For the first one, we didn't know if it was a homework grade. [The faculty member] just called everything "quizzes" and "tests." I worked in a group of three and we were like, "okay, let's work on this together." It was actually pretty hard.

The student said the group discussed the rules, agreed the boundaries were unclear, and chose to work together without seeking clarification. They preferred not to know if their work together was allowed. The student went on to explain how they learned they were cheating. "In class, the professor asked: 'Did you run into any issues when you were taking your online quiz?'" The student went on to describe the classroom exchange: "So, someone is like, 'can we work in a group for the quizzes?' and [the faculty member is] like, 'actually, no.'" Based on this new, unsolicited information, the student chose not to join the team to work on the next quiz. He/she explained, "I received a text from one of the girls I was working with and she was like, 'Hey, do you want to meet up with [the third person in their group] to work on the second quiz?'" The student said: "I just told her I was going to be by myself." In addition, this story was the only instance I found in my research in which confusion had been caused by a faculty member's in-class statements. In all the other instances in which students said they had been unsure, the faculty member either had not provided guidelines or had provided ones that had seemed incomplete once the students began to work together. Here is one student's decision-making process about a more typical situation:

Whenever [the faculty member] doesn't say anything, my default is that when I work with someone, I do it for the purpose of learning the material. Not for copying their homework, and likewise, I wouldn't let someone copy my homework either.

The student went on to say, "I don't think there's ever been an incident where I was unsure" about the boundaries of collaboration, and added, "Our professors encourage us to learn to collaborate with others. That's why they have so many group projects." A more likely cause of confusion was, again, a disconnect between what a faculty member said and a teaching assistant said or did.

I also found that most students said they would ask if they were unsure of the boundaries of collaboration, but in practice, only some did. Here is one student's description of how he/she inquired when it was unclear: "What I did, was I asked the professor, 'Are we allowed to work with someone else?' If they say, 'No,' then you don't. If they say, 'Of course,' then you do. When in doubt, ask." And, here is another student, talking about the value of asking for clarification: "You don't want to get thrown out of college for cheating on something when you thought it was okay to collaborate with others. If it's iffy at all, I always ask, just in case." As another example, in Story 28 (in Table 5.7), the student who used a team-developed Google Doc during an open-note test regretted not asking, in hindsight: "This was something that I felt was in a gray area. I think it would have been more morally correct to go ask the teacher like, 'by the way, we're doing this.' But we never did."

**Faculty members' encouragement of collaboration.** While not all students reported faculty members talking about the boundaries of collaboration as it related to

academic integrity, they did all report that faculty members encouraged them to collaborate. They said that faculty members encouraged them to work with others, and on homework, and shared many stories of faculty members encouraging them to learn from one another. For example, one student told me about his/her grades on take-home “quizzes” assigned for one class, saying, “I kept getting fours out of fives, which are decent, but I really wanted to get fives out of fives.” Therefore, the student asked the professor:

I went up to and said, “Why am I getting fours? Why can't I get fives?” She goes, “Look, the best way to do really well on these quizzes is to collaborate with others.” I was like, “Oh, you can? It's a quiz.” She was like, “Yeah, but you're taking it online. Go collaborate with other people.”

The student explained how the faculty member talked about the value of working in teams: “She's like, ‘Go find a group. Study with them. Talk about it. Talk about each question, that way you guys can get through it together.’” He/she emphasized the faculty member’s message, adding, “She specifically was like, ‘you need to go and work with other people. It will really help you understand concepts.’” The student also talked about acting quickly on the faculty member’s advice: “I was like, ‘done. You told me to. I'll go do it.’” In addition to believing their faculty members wanted them to collaborate, many of the students believed that faculty members valued collaborative skills:

A lot of times professors will say, “I encourage you to do this on your own, to make sure you understand it. But if you don't understand it, you need to find a way to understand it. You need to collaborate with others to figure it out. Then you'll understand it.”

Beyond individual faculty members, some of the study participants described collaborative cultures and purposeful integration of collaborative learning into their

academic communities. This happened, in particular, in academic colleges or departments. In these cases, the students said that collaboration had been encouraged or allowed in every class. For them, collaboration was the norm and they strongly believed faculty members expected it:

I've never really had a faculty member say, "Do not work collaboratively together on homework." Usually, the faculty would say something like, "Yeah, you might want to work together in a group with this." I don't think there's ever a time really in my undergraduate education where I've experienced a faculty member just saying, "You cannot work with another person on this homework."

**Faculty members' expectations of student learning.** I also heard, from every student I interviewed, that they believed their faculty members intended them to learn. In addition, while many described homework processes they believed wasted time (in particular, students disliked the online homework system that has been adopted by many departments on campus) they all believed the faculty members assigned homework to support learning. "I understood why [the faculty member] wouldn't want us to work together, or to just get answers from other people," said one, "That would defeat the purpose. That wouldn't be learning. I understood that," said one. Here is another example:

In terms of faculty, they definitely think learning is important. When I didn't do well on that first [course name] exam, my professor said, "You think that your GPA is the most important thing. You think getting a good grade is the most important part of college. But the most important thing is learning. Because if you don't learn it, and you go into industry, and they realize you don't know what you're doing, you're going to get fired." She was like, "Just learn the concepts. The grade doesn't matter. Just show me that you can improve. Show me you know what you're doing."

Now, let us look at students' experiences with the phenomenon that is the focus of this study: unpermitted collaboration on homework.

### **EXPERIENCES WITH UNPERMITTED COLLABORATION ON HOMEWORK**

Seven students told stories about participating in unpermitted collaboration on homework. They were the most collaborative students in the study and were the source of most of the stories I collected. They told me 22 stories, or 12 (of 19) stories about permitted and all ten stories about unpermitted homework collaboration. The assignment types represented by their stories are detailed in Table 6.3 and included all four types described in Chapter 5: individual and group projects, papers, and presentations; homework problems; and exam preparation. As can be seen in Table 6.3 and as discussed in the previous chapter, the assignment type on which the students were most likely to collaborate was homework problem sets. Six of the seven students did this when it was not allowed and, of those, four did it when allowed.

Table 6.3: Permitted and unpermitted collaborative assignments described by students who engaged in unpermitted collaboration on homework

	Permitted Collaboration				Permitted & Unpermitted Collaboration		Unpermitted Collaboration	
	Group Project	Indiv. Project	Home-work	Exam Prep	Home-work	Exam Prep	Home-work	Exam Prep
Student A	1		1				2	
Student B		1					2	
Student C	1				1	1		
Student D	1		1				1	
Student E			3		1			
Student F			2			1		
Student G	1				1			
Total	4	1	7	0	3	2	5	0
	12				10			

**Types of collaboration on homework.** All the students talked about the value of learning and, as shown in Chapter 5, all the stories they told that are a part of this study included all five attributes of collaborative learning. Nevertheless, I felt it was important to look carefully at each of the stories I collected about unpermitted collaboration on homework to affirm that the students were engaged in learning behaviors and that those behaviors had been forbidden. When I delved deeper, I found that the students were engaged in three types of forbidden activities:



1. Working together on problem sets,
2. Using additional materials, and
3. Manipulating an online homework or testing system.

In all the stories in which the students worked together on problem sets or study guides, the students were engaged in learning behaviors that were forbidden. Moreover, in most of the stories in which the students were using additional materials, they were doing so for learning. However, none of the instances in which the students manipulated an online question and response system was aimed at learning. Therefore, while the students were engaged in both unpermitted collaboration and collaborative learning in all 10 stories, there were only seven stories in which the students' learning behaviors were forbidden. These are summarized in Table 6.4 and detailed below.

Table 6.4: Assignment types; permitted activities, if engaged in both permitted and unpermitted collaboration); unpermitted activities; and unpermitted learning behaviors, if any

<b>Story # and Assignment Type</b>	<b>Permitted Collaboration</b>	<b>Unpermitted Collaboration</b>	<b>Unpermitted Collaboration for Learning</b>
#20 Homework	---	Working together on problem sets	Working together on problem sets
#21 Homework	---	Working together on problem sets	Working together on problem sets
#22 Homework	Working together on problem sets	Using additional materials	Using additional materials
#23 Homework	Working together on problem sets	Using additional materials	Using additional materials
#24 Homework	---	Working together on problem sets & manipulating an online homework or test system	Working together on problem sets
#25 Homework	---	Working together on problem sets & manipulating an online homework or test system	Working together on problem sets
#26 Homework	Working together on problem sets	Manipulating an online homework or test system	---
#27 Exam Prep	---	Working together on problem sets	Working together on problem sets
#28 Exam Prep	Working together on problem sets	Using additional materials	---
#29 Exam Prep	Working together on problem sets	Using additional materials	---

***Problem sets—Stories 20, 21, and 27.*** In all 10 stories about unpermitted collaboration on homework, the students were assigned problems to be completed for

homework or were provided with a study guide for test preparation. In half of the stories, working together was allowed and it was not allowed in the other half. In three stories (Stories 20, 21, and 27), working together on problem sets was the sole form of collaboration and was forbidden.

The two students described in Story 20 (in Table 5.6), had a long-term academic partnership. They worked collaboratively on homework in multiple classes, regardless of whether doing so was allowed. In addition, they did the same in high school. For this story, regarding the class, the student said, “I have taken three semesters of [subject], and had a very strict professor that didn’t want collaboration on any of the assignments. You were not supposed to get help or do homework with other people.” Regardless, the student went on to describe the pair’s ongoing collaboration:

We were living together and we were taking the same class at the time. So, a lot of times we’d be like, “Hey, did you finish the homework, what did you get?” It wasn’t so much like we copy each other’s work. We were just comparing work, and a lot of times if we had a different answer, it was like, “Oh, we’ll see [in class] tomorrow.” ... But other times [the conversation was]: “I can’t figure this one out, how did you?”

The student said completing the assignments together was a part of their routine. They chose to work together, said the student, for learning, knowing it was not allowed:

It wasn’t like we were copying off a textbook, but we were working on our homework together. We just always did our homework together. So, it wasn’t so much of we were unsure. We just felt like it was a gray area. It wasn’t like we were copying, but we were giving each other tips or pointers because we studied together. We always studied together. ... And I think that’s why we did so well, not on the assignments but on the tests, because we had somebody that we could work with and that could correct us, whatever time of day.

The student who told me Story 21 (in Table 5.6) worked independently and then collaboratively with a partner to complete homework problems. The students compared answers and worked together when their responses differed. This was in support of learning, but collaboration was not allowed. When I asked if the student had encountered any ethical issues related to working with others, his/her response was: “I definitely have before. It's just because I put so much value on group knowledge.” The student understood the faculty members’ request for independent work and justified knowingly cheating due to a desire to learn:

Sometimes you're not supposed to help people with homework. You're supposed to do it on your own because the professor wants an evaluation of what you know. I know personally I'm going to do better in the class and learn more or know more if someone else is walking me through something or I'm helping someone else with their homework. ... I don't consider it cheating or unethical to help someone out with their homework. Sometimes you're just not supposed to do it.

In addition, the student said that, if one of the pair did not finish his/her homework, they could copy the other student’s answers. The student justified that cheating differently—he/she did not describe it as learning:

There is obviously a line. If I think I’m in a gray area I go with the gray area. I think it happens to everyone. You feel kind of gross about it sometimes. I think you just have to reconcile that with needing to learn it later. You have to sit down with it again. I have done that before, I sat down with someone the next day and learned how to do it to reconcile inside myself: “It’s okay because I learned it.” I collaborated instead of just copying it. I just collaborated a little later.

In Story 27 (in Table 5.7), three students worked together on exam problems, when it was not permitted, believing they were homework problems. They were unsure if working together on homework was allowed—this is the one story a student told me about being confused about an assignment. As the student described it, “We didn't know

if this is just for homework grade. He just called everything quizzes and tests. It was actually pretty hard.” The students worked collaboratively:

We were like, "Okay, let's work on this together." ... I've never had to take such a hard online quiz. ... It was really difficult. ... We were quite thankful that we could work together, because I think we all got a seven out of 10. We couldn't go that far by ourselves.

While the student did not ask if working together was allowed, he/she did decline to continue working with others once the faculty member clarified the rules. He/she told the others: “I think that professor says we can't work together, so I'm not going to.”

***Problem sets and use of additional materials—Stories 22, 23, 28, and 29.*** In four of the stories, the students told about unpermitted collaboration, the students worked together on problem sets and used additional, unpermitted materials when doing. In two instances (Stories 22 and 23), the students used unpermitted materials while learning collaboratively, and did so on homework assignments throughout a term. In the other two (Stories 28 and 29), the students worked together to collaborate on learning, and then used unauthorized materials to cheat on a test. In Story 28, the students cheated on multiple tests using this technique. The students in Story 29 cheated on a single test.

The group of students who worked together collaboratively on homework and test preparation as described in Story 22 (in Table 5.6) were allowed to work together. However, the group used an unpermitted digital collection of past homework and test answers when studying. The student implied the database was well known: “I don't know if you've heard about this, there is something that people call ‘The Holy Grail.’ It's an online accumulation of all the past homeworks and tests for [a course].” The student

described it as, “a huge database, so you certainly have most of the answers” and attributed its existence to years of coordination by students in the academic program that required the course:

Students add to it each year. They scan the solutions in. Sometimes the teacher, after he releases the homework, he’ll post the solutions. Students keep that and add it to the database too. And, the teacher recycles homework and test questions.

They also used other materials when studying, some provided by the faculty member:

[The instructor] would post solutions for past homework and tests online for us to study, so he was already doing something similar [to the database]. But they weren’t the actual questions that were on the test, like you could get in the database.

Therefore, “there were other ways we studied besides using the database, but it was still one of the tools we used,” according to the student. He/she justified the group’s academic dishonesty by explaining that other students used it too, and then went on to describe how they were using it to learn: “If we had no idea how to do [a problem], we would look at the solution in the database.”

The students in Story 23 (in Table 5.6) also had access to past graded homework and tests, but from a single semester and in writing (rather than digital). In this instance, three students within a larger group had access to materials they used but did not tell the others they were using:

I had the solutions to all the homework assignments for the rest of the semester and I used those to get through the class. The people working with me, some knew, some did not know, because if they knew then the solutions would get out, and maybe the professor would find out and that would be a bad situation to be in. So, we kept it to ourselves, me and my two friends. ... How did I use them? We’re stuck on a question, we’ve been here two hours, I look at the answer to figure out the next step and say: “Hey! What if we try this? Okay, cool.”

At the close of the semester, the students destroyed the materials. They were worried their reputations would be negatively impacted if their peers knew they had cheated. Nevertheless, their cheating was aimed at learning.

On the other hand, Story 28 (in Table 5.7) is an example of students' engagement in permitted collaboration (collaboration on problem sets) that was aimed at learning and unpermitted collaboration (using addition materials) that was aimed at cheating. The students cooperated, and then collaborated to complete a faculty-provided study guide for an essay test. However, instead of bringing their own study guide answers to the test, which was allowed, the students brought the answers of everyone in the group. "We would use [the Google document] during the test," said the student, who suspected their sharing may have been cheating:

I felt like I was unsure if I was crossing the line because it was like, we were studying together before the test but now we have this with us during the test. There was never a time where I personally, directly copied someone's answer, because a.) that would have been dumb because the teacher could have known, b.) I didn't really need to because I would have already read their answer beforehand.

It is unclear to me whether the faculty member intended the students to collaborate in this way, but it seems unlikely. In addition, even though the student was "unsure if I was breaking a rule," he/she avoided finding out: "I felt was a gray area. I think it would have been more morally correct to go ask the teacher like, 'by the way, we're doing this,' but we never did."

Similarly, in Story 29 (in Table 5.7), the students worked together on problems, when it was allowed, to prepare for a test. The student said, "I was working with another girl, and she had gotten the answers for a test, but not even the answers, it was the topics.

... Her friend that had taken the exam before her gave those to her,” and went on to express his/her hesitation, saying, “I was really, really unsure about that,” and sharing his/her response to the situation:

I just said, “No, it’s okay, let’s just go over everything.” That’s how I said it to her. I didn’t know if she’d be offended. I didn’t know what would happen. So I just told her, “I think it would be better if we just went over everything instead of just those particular topics, because we don’t know what’s going to come.”

Nevertheless, the student failed to dissuade his/her collaborative partner, and ended out cheating too: “She was really adamant about going over those, and in the end that’s what we did.”

***Problem sets and manipulating online system—Stories 24, 25, and 26.*** In the last three stories, the students’ behavior was the same: the students worked and learned collaboratively on problem sets and also participated in collaborative cheating by manipulating an online homework or test system to maximize their grades. In two instances, Stories 24 and 25 (in Table 5.6), the learning behavior (working together on problem sets) was forbidden. In the remaining instance, Story 26 (in Table 5.6), the learning behavior was allowed.

The student who told me Story 24, described his/her cheating, both by working with another student when it was not allowed and by continuing to work with the other student to manipulate the online homework system to get the highest grade possible:

There were online assignments. And, online assignments, sometimes it's very difficult to do them. ... Sometimes, it is not stated very clearly in the online instructions which [type of answer] they are willing to accept. Sometimes it gets very, very, very confusing. People end up trying different things. It's like, I tried this, did this work? You tried this, did this work? And [we were also] working



with each other and we knew that was cheating. We knew that asking each other, “what did you put in, so I can put it in and get the right answer?” was cheating.

The student also expressed regret for manipulating the online system. He/she said it might have been a barrier to the learning that could have come from the trial and error of the online quizzes:

You don't learn as well. But at the end of the day, you have four other classes, you have not slept in two days, it's about the grade and then you don't care. ... It sucks to say, but it's true. I love to learn [course topic], and I'm glad I learned it. I do think I could have done better if I hadn't [manipulated the quiz system] sometimes, but I also had a 90-page [assignment] due the next day, so what are you going to do? You've got to make a hard call sometimes.

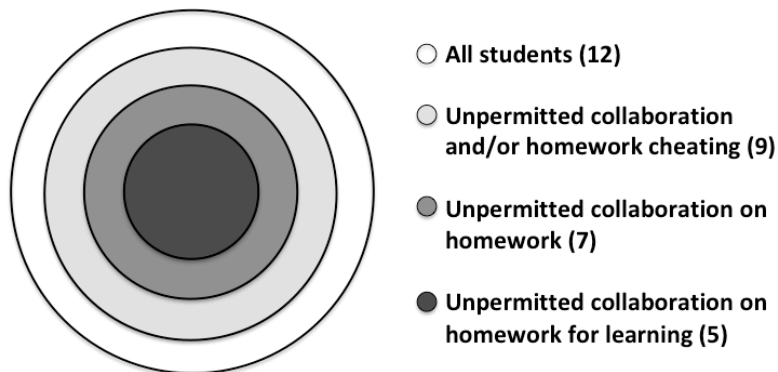
Story 25 was similar, the students worked collaboratively when it was not allowed and then worked together to manipulate the online homework system to improve their grades. The student said the grading schema of the online program caused them to cheat: “You only get three tries, and if you are off by point zero one, it's ridiculous.” The student admitted, “I definitely did work with two other partners, just like asking, ‘Hey. What did you get for this answer?’ I've tried it so many times, and we just want the right answer to make a perfect score.” The student ended the story, saying, “I should have felt bad about it or accept the consequence, not finding the answers.” Instead, the student said he/she thought, “Yeah! I get to go to sleep!” In the remaining instance, Story 26, the students were allowed to work together and then continued on to manipulate the online homework system. Here is how the student described it:

We would work in the library. We would collaborate on the homework and try to figure it out together. “How do you do this? How do you do that?” When we thought we'd figured it out one of us would type it in [to the online homework system]. Most of the time it was right, but if it wasn't we would redo the problem and then someone else would submit it. Eventually we would get it right.

The student shared their purpose: “We each got six tries but usually we could figure out any problems in our work quickly, so most of us would get full credit.”

***Student engagement in learning.*** As explained earlier, seven students told me ten stories about unpermitted collaboration on homework. Of those, five participated in the narrower definition described above: unpermitted collaboration on homework in which the unpermitted behavior was a learning behavior. Figure 6.2 is an illustration of this further categorization of the students and their stories.

Figure 6.2: Study participants’ engagement in collaborative and/or homework cheating as well as unpermitted collaboration on homework for learning



In addition, Table 6.4 provides a new lens—cheating for learning—through which to consider the information the students provided about their experiences.

Table 6.4: Students' descriptions of their participation in collaborative and/or homework cheating, including unpermitted collaboration on homework that was and was not for learning

The student described...	1	2	3	4	5	6	7	8	9	10	11	12
<b>Unpermitted collaboration on homework (7)</b>	×	×	×	×	×	×	×					
<b>Unpermitted collaboration on homework for learning (5)</b>	×	×	×	×	×							
A culture of cheating (7)	×			×	×	×	×	×	×			
Opportunities to cheat (12)	×	×	×	×	×	×	×	×	×	×	×	×
Cheating on homework (9)	×	×	×	×	×	×	×	×		×		
Collaborative cheating (8)	×	×	×	×	×	×	×			×		
Being accused of cheating (2)							×			×		
Breaking university rules other than cheating (2)		×	×									
Being assigned collaborative work (12)	×	×	×	×	×	×	×	×	×	×	×	×
Faculty encouraging collaboration (12)	×	×	×	×	×	×	×	×	×	×	×	×
Faculty discussing academic integrity (12)	×	×	×	×	×	×	×	×	×	×	×	×
Faculty setting boundaries for collaboration (9)	×	×	×	×				×	×	×	×	×
Faculty discussing academic integrity (12)	×	×	×	×	×	×	×	×	×	×	×	×
Receiving mixed messages about collaboration (5)				×	×		×	×	×			
Faculty prioritizing students' learning (12)	×	×	×	×	×	×	×	×	×	×	×	×

## MORAL DEVELOPMENT AND ACADEMIC INTEGRITY

One intention of my interview questions was to gather information on the students' moral development, or their ethical reasoning and decision-making skills to see

if it aligned with the students' engagement in academic dishonesty and, in particular, with unpermitted collaboration on homework. For this reason, I asked the students several questions about ethical decisions and challenges during college, and questions about ethics and cheating. I started by asking the students about their family's values—"My parents have always emphasized honesty and I always try to stick to that as much as possible," said one—and their personal values. I also asked them how they had applied their personal values to decision-making. Many of the students' responses demonstrated their adoption and application of their family's values. Here is one student's answer, for example:

If ethical decisions ever arise, my main question is: Will I be able to sleep at night after making this decision? Would my grandmother be disappointed in me if I made this decision? ... Those are the two main things that I ask. If you can make an unethical decision and live with it, but your Grandmother's going to be really disappointed in you, you probably shouldn't be making it. That is a really good indicator of whether or not I'm making the correct choices for me.

Nevertheless, other students described ethical beliefs that evolved during college, and a simultaneous evolution of their cheating behaviors. Here is one student's description:

In [academic department] as a whole, collaboration is encouraged. There's this very thin line between collaboration and cheating. A lot of people cross that line very frequently. I used to be one of those people. It's just easier sometimes. Like I said, [my] major is much more focused on getting a good grade, sometimes, than actually learning. One ethical decision that I made is just to not cheat, as simple as that is. How did I make that decision? I saw it as dishonest. My priority, in that sense, was honesty.

I saw this shift in values and behaviors in every one of the students who had become more spiritual while in college, and one student who had become more spiritual in high school shared stories of the same. In each case, if they had participated in cheating, they

stopped doing so after becoming more religious or spiritual, or finding faith for the first time in their life.

**Cheating decisions as ethical decisions.** The first of the two interviews I did with each student was intended to gather general information about the student and his/her experiences in college. I did not ask any questions about collaboration or academic integrity (those were the focus of the second interview). Nevertheless, my questions to students about their experiences with ethical decision-making led several of them to discuss cheating in the first interview. In addition, eventually, every student I interviewed described cheating decisions as ethical decisions. Some of the students I interviewed even described decisions about cheating as their greatest ethical challenge while in college.

**Personal ethics as a reason not to cheat.** Most of the students, both those who did and did not participate in academic dishonesty, said that their personal ethical beliefs were a deterrent to engagement in academic dishonesty. In addition, all the student participants described academic integrity as a demonstration of personal ethics or moral character, and most described academic dishonesty as a moral failure. For example, one student said: “If I were ever academically dishonest, I don’t know what I would do with myself,” and, “I feel like I would be so disappointed with myself. I’d be so disappointed around my Mom and wouldn’t tell my friends or anything. I wouldn’t be able to sleep at night. I would not be OK with that.” The student went on to explain that he/she tried to avoid opportunities to cheat, to avoid cheating:

I need to make sure that I do not even get close to that line. I have to make sure that I'm like 10 feet behind it. ... It's a matter of, just I've got this end goal to learn as much as I can, do as well as I can, do my best and graduate, and figure out what I'm going to do. If I was scholastically dishonest, I'm not really able to do that. For my own sake, for my family's sake, for my friends' sake, for my own mindset, I need to stay true [to my values].

Other students also told me about trying to avoid being tempted to cheat, for example:

I went on Facebook a lot less, because I noticed that with Facebook group, it is nice to exchange notes when someone is sick, or to remind people what the professor said about an upcoming test—what [the professor] says is going to be on it. But, it's easier to cheat on the Facebook group too. ... I feel like it is a temptation to cheat, since it's readily available.

The student added: “if you want to be a person of integrity,” you should “want to uphold the university honor code.” I also heard stories about collaborative groups in which the group's culture was one of integrity, for example:

My friends don't come and ask me for answers, but when they're stressed you feel really bad for them. In terms of that, it's a lot better to help them through it. Even for me, they do the same for me.

The student said that, “they'll walk me through my homework when I'm having a really tough week,” and provided an example:

Last semester I had bronchitis and strep at the same time. I couldn't get my homework done, and so I sat on the phone and I did not speak. They said, “Okay, you're going to multiply these numbers, because of these things.” I lost my voice. I couldn't speak, at all, but they helped me get through that. I understood what was going on, learned the concepts but in a faster way, rather than having to fail on my own. Then I went over it on my own, later, when I felt better. That's how we help each other, but in an ethical way, because if we don't, if I handed them the answers, I don't know if I would sleep at night.

*Own cheating as a poor ethical decision.* Many of the students did not shy away from applying their values to their behavior: The majority of the students who participated in academic dishonesty described it as a poor ethical decision. For example,

the student who shared Story 22 (in Table 5.6) provided excuses for accessing the database of questions and answers from old homework assignments and tests, but also admitted it was not right:

The teacher would post solutions for past homework tests online for us to study. [So] he was already doing something similar. They weren't the actual questions on the test, whereas the database might have actual questions that were on the test. I was like, "okay," it was a very grey area and honestly, I think looking back, it was not ethical.

In addition, here is another example of a student justifying his/her cheating while acknowledging it was not ethical:

A lot of times when it's hell week and you've got four exams, two homework assignments, and additional problems to do, and you can't get it done—there's no possible way. And your friend needs help with the homework and they say, "Can you send me your answers and I'll copy it onto it later?" It's unethical, because they would be copying your homework, but you feel so bad because you know they're having a tough week, and you trust that they would do it on their own later.

Some of the students also described cheating decisions without an ethical lens. As one said: "Of course, there's the 'Do we think that we'll get caught?' Sometimes, ethics just doesn't come into play when you want to get something done, especially at the end of the semester." Other students simply denied (at least some of) their participation in academic dishonesty was unethical:

- There's always a choice. If you have the opportunity to cheat, do you? You always say no. But, working with people, I never felt like I was doing something unethical.
- I don't consider [working on homework together when it is not allowed] cheating. It's not unethical to help someone out with their homework, just sometimes you're not supposed to do it.

**A reason or justification for own cheating.** Despite the fact that 1) all of the students said cheating decisions were ethical decisions and 2) most of the students said their own personal values kept them from cheating, most of the students in the study also described cheating. In addition, most of them participated in unpermitted collaboration on homework. Therefore, when it came to academic integrity, most of the students were acting in ways that did not reflect their stated values. For example, one student told me: “I have strong moral values. I don't like doing things that I consider wrong, I've noticed that [describes me] a little more than other people,” and also cheated. In the students’ defense, some did not seem to be aware of the contradictions between their statements about valuing honesty and ethics and their participation in cheating. Many also conflated being ethical with learning, and therefore conflated working with one another (even when it wasn’t allowed) with doing the right thing. Other students described making conscious decisions to cheat solely to gain an advantage. They described many reasons for doing this, as expected from the literature review. For example, one student said: “Well, of course, there’s the ‘Do we think that we’ll get caught?’” Sometimes, ethics just don’t come into play when you want to get something done, especially at the end of the semester.” Here’s another student describing a similar thought process and actions:

When you start getting towards the end of the year, “Will we get caught,” is the first thing you think. If it’s an online assignment, there’s no way they’re going to know. You do it. If it’s a worksheet that’s not a big grade, it’s a completion assignment, then do it. You don’t care. You get it done. ... When we decide that it is unethical, it’s when it’s huge projects, like something that’s worth a huge chunk of your grade. I would like to say that it’s because of morals: “Oh we don’t want to do this, it’s wrong,” but it’s because [of] the fear of getting caught. And fear of the zero [grade] is the biggest motivator on the face of the planet.



In addition, here is another student and another reason—this one is talking about using ill-gotten “solutions” to his/her homework problems (additional, unpermitted materials) to complete homework assignments:

What I realized is that it will either take me ten hours to figure this out myself, or I could have a pointer on where I should go and it’ll take me two hours. I ended up keeping the solutions. It still took a very long time with the solutions. That was an ethical decision: I realized, so long as you get the homework done and understand the derivation, and gain knowledge out of it.

See Table 6.5 for a summary of students’ ethical beliefs and engagement in unpermitted collaboration on homework.

Table 6.5: Students’ reflections on ethics and academic integrity and participation in unpermitted collaboration on homework that is and is not for learning

The student described...	1	2	3	4	5	6	7	8	9	10	11	12
<b>Unpermitted collaboration on homework (7)</b>	×	×	×	×	×	×	×					
<b>Unpermitted collaboration on homework for learning (5)</b>	×	×	×	×	×							
Cheating decisions as ethical decisions (12)	×	×	×	×	×	×	×	×	×	×	×	×
Personal ethics as a reason not to cheat (10)	×	×	×	×		×	×		×	×	×	×
Own cheating as a poor ethical decision (7 of 9 who cheated)		×	×	×	×	×		×	--	×	--	--
A reason or justification for own cheating (6 of 9 who cheated)		×	×	×	×	×			--	×	--	--
Personal ethics as a reason to cheat (0)												

Table 6.6 shows little correlation between ethical beliefs and cheating behaviors. Further details, shown in Table 6.8, reiterate this lack of alignment between the students' statements and actions. Nevertheless, there were some nuances around some of the students' beliefs and how those surfaced in the stories collected and what is reported here, and those indicate a greater alignment. Tables 6.5 and 6.6 reflect students' cheating throughout college, but do not reflect changes in their behaviors over time. As described in Chapter 4, several of the students I interviewed had become significantly more religious or spiritual during college and, in most cases, had become engaged in organized religious groups on campus. Some of these students participated in academic dishonesty before their change in beliefs, but none did afterward. These students, therefore, appear in the Table 6.5 and other tables in this and the next chapter as cheaters (because they were, early in their college careers), who believe cheating is unethical, and who report acting ethically later in their college careers. In addition, there were students who professed a belief that cheating decisions were ethical decisions but never discussed using an ethical framework when deciding whether to cheat.

Table 6.6: Summaries of students' responses related to ethical decision-making and cheating and whether they participated in unpermitted collaboration on homework

Students described...	Participated in unpermitted collaboration on homework		Participated in unpermitted collaboration on homework & for learning		Did not participate in unpermitted collaboration on homework	
	#	%	#	%	#	%
Cheating decisions as ethical decisions (12 students)	7	58%	5	42%	5	42%
Personal ethics as a reason not to cheat (10)	6	60%	4	40%	4	40%
Own cheating as a poor ethical decision (7 of 9)	5	71%	4	57%	2	29%

***Strong ethical foundations and academic integrity.*** As discussed in Chapter 4, several students in the study shared stories about personal growth in their religious or spiritual faith during college. These students were particularly likely to talk about cheating decisions as ethical decisions, or as a reflection of a student's character. One of these students told me about an opportunity to cheat he/she encountered when I asked about making ethical decisions in college. The student described deciding not to cheat, because, "It just seems really wrong. And, again, it's also because of my faith. I'm a Christian. I can't do that, knowing that I am also offending this higher being. In that way, that was an ethical decision." Another student whose faith had grown while in college told me about being notified of research papers for sale, saying:

Sometimes I'll get text messages, I don't know where they're coming from, to be honest. But I'll get text messages and they'll say, "You can get an A+ on your essay. Just give us a topic and, blah, blah, blah." They're wanting to write it for you and then you pay them to get that grade.

“Obviously, I don't think that's ethical,” said the student, “I just ignore those [messages], [I] delete it as quickly as I possibly can.” The student went on to describe the role of faith in his/her decision-making:

I think more than just wanting to stay true to myself, in a way, for me it is like my faith, my religion. If I [cheated], I know that I'm not only offending my professor, but ultimately God. So, that's what drives me to make these moral and ethical decisions.

Moreover, again, more than one student I interviewed, who had found faith in college, had cheated before he/she became religious or spiritual and decided not to afterward.

Here is one example:

I'm an imperfect person. I feel like, including myself, everyone has cheated in universities. As I got to learn more of myself and seeing how I want to advance myself, I want to get ahead, which conflicts with the biblical values of wanting to make sure that I'm a person of integrity.

The student went on to talk about cheating with homework answers that were shared in Facebook groups (which I also heard about from other students), and joining collaborative study groups instead, after becoming a Christian:

I chose to reduce my Facebook time and try and work in groups with people, instead of relying solely on Facebook, because I can't learn with people telling me the answers. I decided to do that after I talked to my leader in the Christian fellowship that I am in. ... My priorities, when I was making this decision, was that, 1) I want to be God honoring, 2) even though people may get better grades than me, it's just a number. If people want to get ahead, that's fine.

However, letting go of the easy resource of other students' answers in Facebook was difficult. “I wouldn't say it was an easy decision,” he/she said. “It was actually very tough.” The student said: “There are many times where I'm struggling at homework until 3:00 a.m. I want to cheat so badly so I can go to sleep and have enough sleep for my 8:00

a.m. [class].” Nevertheless, the student stuck to his/her decision not to cheat. “You know why? I’m more than a bad grade,” said the student. “That’s only one class, out of, how many classes [have I] taken in college? That’s fine,” explained the student. Another student, who became a Christian during his/her time at the university, talked about cheating, saying, “I see how it can hurt God and hurt others, not having integrity about my work.” The student, one who participated in unpermitted collaboration on homework, said that, “now that I made my decision to follow God,” he/she no longer cheated:

My priorities then or before [becoming a Christian], was we just want to get something done and we want to cheat to get it done. My priorities then were make it quick, efficient. We all want to go to sleep. We all want to make a good grade. We all want to be done. Now my priorities are making sure that we’re upholding the university’s rules.

***Weak ethical foundations and academic dishonesty.*** On the opposite end of the spectrum were students who cheated throughout their college career. Some of these described themselves as ethical (“I hold that to heart, my scholastic honesty.”). A few described, and even justified, generally disregarding university rules. Here are the reflections of one student, who told me, “I tend to sometimes think I’m above restrictions placed on me by other people”:

It’s interesting, we learn so much in our classes about the intersection between law and ethics, and what is right versus what is legal. They are not the same thing at all. I’ve personally made a lot of decisions that I think would be considered just, but not [within the] rules.

While this was not the only student who talked about widely ignoring rules, this one had the strongest beliefs about the appropriateness of his/her unpermitted actions. The student:

- Viewed what is right and the rules as separate and unique: “I definitely always think about what the right thing is first, and then I consider rules,”
- Talked about making value judgments about which rules to follow: “I think I’m right most of the time,” and
- Described his/her beliefs and actions as a family value: “My father’s like this too. This is an example of something my father passed down to me.”

This student also, very confidently, justified his/her ongoing decisions not to follow rules:

I actually know a lot about myself. Frequently, I will break the rules if I think I’m doing the right thing. [This] isn’t always a good thing. Sometimes it’s a bad thing. Rules are there for a reason. But Superman broke the rules.

As another example, below is a quote from a student who frequently engaged in academic dishonesty, and believed his/her behavior was typical within his/her academic program:

The [academic program] has a really strong ethics component. It's a big deal. You sign an ethics statement at the beginning of the year. You take a class on ethics. ...We never want to be a program that is known for being unethical. That being said, there's unethical people everywhere, and I think [the program] is actually a pretty big magnet for them.

The program, the student said, “sets you up for success very well, and a lot of unethical people would be drawn towards that.”

### **GOAL ORIENTATION AND ACADEMIC INTEGRITY**

It was also important to me to gather information about the students’ goal orientations. I was looking for indications of whether the students were focused on earning a high grade (or, had a “performance” orientation) or on learning (or, had a “mastery” orientation). My intention was to see if it aligned with their engagement in academic dishonesty and, in particular, with unpermitted collaboration on homework.

**Students' stated priorities.** I began this area of inquiry by directly asking each of the students: "Which is most important: Learning or grades?" A small majority of the student participants said "grades." But, most of those students also said they wished (for various reasons) that their answer was "learning." The remainder of the students said that learning was most important. In other words, when I asked this question, I expected to hear one of two answers (learning or grades), but instead, students gave me one of three answers:

1. Grades are most important,
2. Grades are most important but learning should be, or
3. Learning is most important.

***Prioritizing performance (or grades).*** Seven of the 12 students told me that grades were more important than learning. Here is one student's answer, for example, to my question:

I think to answer this question, practically speaking it's better to get a good grade because that will actually help you get a job. Most of the things you learn, you don't really use in your specific job—things related to the job you learn on the job. Optimally I would say it's more about learning, because that's kind of the point of why we are here at the university. But practically speaking I would probably say it's getting good grade.

Another student, when answering my question, explained why he/she prioritizes grades over learning, and described doing so as a moral failing:

I hate myself for saying this, but I'm going to say getting a good grade. It's like if you learn a lot but don't get a good grade where are you going to go with that? Whereas, if you get a good grade but you don't learn that much you can still go

places—it's going to be okay for your future. I think I would rather get a good grade than learn a lot, personally.

The student also described his/her reason for this belief, saying “I think that's the side of me that needs a secure job and stability,” and “I don't learn for the sake of learning. I'm in college to get a job.” Nevertheless, he/she also stated: “I think learning's important.” The student, finally, summarized his/her thoughts, saying: “if someone held out: ‘get a good grade’ or ‘learn,’ I would pick ‘get a good grade.’” Then the student shared both a justification for his/her behavior—“I don't like that I feel that way. If the universe was a good place, we would all learn as much as possible. You would be okay and happy with the amount that you've learned.” —and also some regrets about his/her beliefs:

Everyone puts so much value on higher learning. I wish that was a reality. But I think I'm a realist. And realistically I would rather make a good grade for future things. I don't like that that's my answer, but it is.

***Pressure to prioritize grades rather than learning.*** Unlike these two students, the majority of the students who said they valued grades over learning attributed their performance orientation to their environment, rather than their own values. These students said they wanted to focus on learning but felt pressured to prioritize grades or said they were expected to perform well academically. Several, like the student quoted above, said this was because of the competition for jobs after college. For example, one student (who was one who cheated) replied to my inquiry with:

That's a hard question, depending on what you mean by “important.” What should be more important is the learning. In the perfect world, that should be more important. What is more important, in terms of successfully landing a job? I think, to most students—and I feel this myself—getting a good grade is going to be what I can put on my resume, [for] future jobs or grad schools.



The student also went on to say: “I think it'd be nice if we could just learn for learning, rather than try to work just towards a good grade,” but he/she did not think that was possible. As another example, here is one student who did not cheat, answering my question about priorities:

I think [employers] want you to think that it's learning. But to them, the good grade is what matters more, unfortunately. Just because, they put so much pressure on your GPA. They judge you so much based off of that. If I were to learn all of the concepts in my accounting classes, but I made a “B-,” they're going to hire somebody with a “B+” who just memorized concepts.

Another student, one who cheated, answered my question with: “Sadly, I would like to say learning, but I would have to say getting a good grade.” The student went on to talk about learning, saying, “if I have to be quite frank, that’s what I strive to do. I try to study more. I try to learn more from lectures.” However, the student also shared his/her fears: “I want to make a good grade [but] the motivation for me is so that I don’t get such a bad grade.” Some students also talked about the competition to be admitted to the university, as a part of this discussion. One shared multiple experiences with being pressured to succeed academically throughout his/her educational career. Here is one of this student’s examples:

You can see in high school students, there are differences in the high schools that teach to the AP test and those do not. My high school taught to the AP test. I think that cut down on learning, to be honest.

Other students also blamed institutional structures or processes in the educational pipeline for their academic dishonesty.

*Beliefs about priorities.* Several students shared their beliefs about the expectations of the university, again beginning with the admissions process. Here's one, a student who did not report cheating, talking about the university:

I think that they want you to think they want you to learn things. But they judge you so much based off of your GPA. The university in general. In terms of admissions, I had to transfer into the [academic unit]. I didn't get accepted [when I was] in high school. I did a year of [general studies], and then transferred in [to the academic unit]. They fully judge you based off your GPA. They line everybody up based off of GPA. They say, "Everybody with a 3.6 and higher gets in." If you have a 3.55, and you learned everything, and you know it better than somebody with a 3.8, you're not getting it.

Several of the students talked about both their experiences with the university and its faculty members, and all of them expressed the belief that the two sent mixed messages about priorities. All the students talked about believing their faculty members intended them to learn—I heard story after story about faculty members who stated or demonstrated that learning was the priority for their students. This was in contrast to how several of the students characterized the institution's culture and values. Here is one example (from a student who participated in academic dishonesty):

The university cares so much about your GPA. They care so much about their rankings. It's all numbers to them. When you actually interact with other students and faculty and staff, they care so much more about you actually learning it. I didn't understand a concept in my [name or course] class. I sat with my professor for 30 minutes. She explained it three different ways, until I got it. She wouldn't do that if she only cared about me getting a good grade. She'd say, "Just memorize it." She cares so much about you actually learning it, being able to apply it in real life. They definitely care more about learning [than the university], faculty and staff.

*Prioritizing mastery (or learning).* Five of the 12 students I interviewed told me that learning was more important than grades. Here is one student's answer to my question, for example (this student participated in academic dishonesty):

I would say learning [is more important than grades], because that's how we do it in [academic program]. I guess before this, I was just, "I need that 'A.'" Like when I was studying for a test: "I just need to pass the test." I have gone through a lot of classes here that I don't remember anything that I learned.

Like this student, several students talked about the impact of the culture in their academic department had on their beliefs. For example, another student (who cheated) said:

I personally think that learning is [most important]. Getting a good grade is something that's important, too. Well, the thing is, I think it really does depend on the school. Because in [academic department], nobody really cares about our grades, they care about what we do, what skills we have to offer. But I do think there are certain majors [where] that maybe that's not the case.

Like some of the students who prioritized grades, this student shared concerns about potential employers' emphases on grades:

I don't think it should be that way. I think you should be here to learn skills or get the higher education that you want, without fear of "it's going to affect what I do." I don't think it should be like that. It should be about "I'm here to learn something that I want to learn and hopefully this can get to a job."

In contrast, more than one student expressed the sentiment that employers expect students to learn and that it is needed for success after graduation. Here is one student's answer to my question about priorities, for example:

I believe it's learning [rather than grades]. I have so many friends that have left [the university] with such a horrible GPA. But they actually came out learning so much and they were able to apply themselves. Whereas when you get a good grade, it looks nice on your resume and everything, and the chances that you'll get a job are pretty high too—passing does "get you that job." But that's just doing

well without actually learning any skills. You're really useless in terms of your abilities. Yeah, I think learning is most important.

Other students talked about wanting and needing to learn to be successful with other life goals. Here is one student (who cheated) talking about wanting to attend graduate school:

Grades versus learning. Definitely both. But in terms of grad school, learning, definitely learning. The grade doesn't say, okay, I'm not saying the grade doesn't say much. If you've worked hard for it and you've gained a lot from it, then, yes, it's good. But just getting a good grade doesn't necessarily say you have ability. ... Have you really learned anything from that course? Have you really learned anything from what the professor was trying to convey to you? ... That's how I feel: It is better to learn.

The student explained further: "If I am able to understand it, and comprehend it, and apply it to my life then that's what's the most important to me." The answers to this direct question to students about their goal orientation are summarized in Table 6.7. There, I have also cataloged the students' less direct statements about their values regarding their purpose in the classroom and when doing classwork.

Table 6.7: Students' descriptions of goal orientations, reflections on academic integrity, and participation in unpermitted collaboration on homework for learning and not

The student described...	1	2	3	4	5	6	7	8	9	10	11	12
<b>Unpermitted collaboration on homework (7)</b>	×	×	×	×	×	×	×					
<b>Unpermitted collaboration on homework for learning (5)</b>	×	×	×	×	×							
Prioritizing learning over grades (when asked directly) (5)	×	×					×	×	×			
Prioritizing grades over learning (when asked directly) (7)			×	×	×	×				×	×	×
Learning as a reason to cheat (5)		×	×	×	×			×				
Learning as a reason not to cheat (12)	×	×	×	×	×	×	×	×	×	×	×	×
Grades as a reason to cheat (6)		×	×	×	×	×				×		
Grades as a reason not to cheat (0)												

*Students' stated values and actions.* Before I move on from the students' stated beliefs about the importance of learning in contrast to the importance of grades, and as can be seen in Tables 6.8 and 6.9, I found no connection between students' answer to my question ("Which is most important: Learning or grades?"), regardless of whether the student participated in unpermitted collaboration on homework at some point during their time in college. Instead, the students' participation in unpermitted collaboration on homework was the same, regardless of their stated beliefs about prioritizing learning and grades.

Table 6.8: Summaries of students' responses when asked to prioritize learning or grades correlated with students' descriptions of participation in unpermitted collaboration on homework

Students described...	Unpermitted collaboration on homework		Unpermitted collaboration on homework for learning	
	#	%	#	%
Prioritizing learning over grades when asked directly (5)	3	60%	2	40%
Prioritizing grades over learning when asked directly (7)	4	57%	3	43%

**Learning as a reason not to cheat.** Most of the students I interviewed expressed a belief that most homework assignments supported learning (so, a mastery orientation).

For example, here is one student's description of the purpose of out-of-class work:

Most homework assignments weren't graded. They were for your benefit, to get practice. ... If you did copy, shame on you. It's not a grade so it really doesn't matter. You're going to be really unprepared for the test. That's usually how it came out for those people. They ended up failing.

In addition, here is other student, talking about classmates who cheated:

They're in that performance based mentality where they just want to get a good grade. ... [But] learning is how they're going to get a good grade. It kind of makes me a bit sad: striving for a letter or a number on a test. Some people strive for that and lose their integrity by cheating.

As illustrated in this quote, all of the students I interviewed expressed a belief that learning is a reason not to cheat. Here is one example a student shared of a student actively prioritizing learning:

For the group homework you just needed one copy of the homework with everyone's names on it. I was truly a group assignment. That meant that a lot of people would just put their name on [a group's] homework before it got turned in, which is bad for them because when the test comes around, they're screwed.

[Then] you don't know anything. That led to some of my friends to just do the homework themselves.

As indicated earlier, some of the students attributed a desire to focus on mastery (and not cheat) on the need to be prepared for their careers. Unlike the students whose focus was on grades, because that would help them get the best jobs (or, simply, get a job), these students' focus was on mastery, which they believed would be valuable in the workplace. Many of the students I interviewed shared the belief that learning in college would lead to success in careers. "We're going to have to use these [skills] one day," said one, "we might as well start now."

**Grades as a reason to cheat.** Half (six) of the students I interviewed expressed a belief that getting a high grade was a reason to cheat (so, a performance orientation). "You only get three tries," one student said when talking about manipulating the online question and response system to get a higher grade, "if you are off by point zero one you're still wrong." Another student, one who cheated, told me: "I think integrity is not a thing you think about late at night. You just care about sleep and the perfect grade." Moreover, another student, who also participated in academic dishonesty said:

In regards to projects, PowerPoints or homeworks that are taking a lot more [time] than what you expected, you're staying up until 2:00 a.m. or 3:00 [a.m.] working on it. [You] just want to have it done. ... Some people are more prone to cheat. Go on Facebook. Go look on the group and ask a question, maybe someone will respond. You look up stuff online, and just copy and paste something. I can't say, "No. I've never done those things before," because I have.

Other students, like in Story 21 (in Table 5.6), said that grades were a reason to cheat. In this story, the students worked on homework individually and then discussed it and worked together to finalize it when it was not allowed. As with some other students I

interviewed, the student who told me this story said he/she was both cheating to improve his/her grade and to learn. Here is how the student described it:

Sometimes you're not supposed to work with others on homework. They say, "Do it alone," but I almost never turned in homework without having someone else look at it or talking to someone else about how they did it—just for my personal peace of mind and because I hate not understanding something. And, obviously, I want to get a better grade.

**Learning as a reason to cheat.** The student who told me Story 21 verbalized a third way of thinking about goal orientation, one not currently predicted by theorists who apply goal orientation theory to academic integrity: Learning as a reason to cheat. Five students expressed a belief that learning or mastery was a reason to cheat, in particular a reason to participate in unpermitted collaboration on homework and to do so for learning. Here is one student's description:

You turn [working on homework] into a collaborative experience and it's cheating. It is and we know it is. At the same time, it doesn't feel like cheating because we don't see how it could be wrong, especially if it's a just completion grade. We're learning from each other the same way we would learn from the teacher. It's just, we're not paid to teach each other. We just do it.

Another student, when talking about Story 20 (in Table 5.6), also said that, "Another reason why we didn't really think it was a big deal was because they were ungraded—they were completion grades" and, "It wasn't like we were cheating to get higher grades." The student also that his/her collaborators provided meaningful feedback, unlike the online homework and test system the students manipulated, when justifying his/her unpermitted collaboration on homework. The student said they cheated to learn:

You're not supposed to work together. ... But, people, we feel the need to help each other out. You feel the need to [say], "Hey, I did this, does it look right to



you?” For me, it’s not copying, it’s just catching each other’s mistake, having some second person look at it. I feel like that was what our professor didn’t want us to do. But in the end, I didn’t see what the issue was as long as we weren’t directly copying from each other. ... That’s how you learn. You do it and then someone corrects you, whether it’s the professor or the student. ... It wasn’t like we were cheating to get higher grades, it was learning.

Another student, who cheated by working with others on homework with additional materials that were not allowed, justified students’ actions, saying working together was fine even though it was allowed, “as long as you get the homework done and gain knowledge out of it.” The student went on to describe the group’s collaborative work: “The homework problems] still took a long time even with the [unpermitted] notes,” and said that, “I gained the same amount of knowledge, if not more, by having the solutions with me so I could reference it.” Here’s another student similarly justifying cheating for learning:

I had the solutions to the homework, and everything you’re taught is that that’s a bad thing to have, even though, in the context of things, it didn’t feel like the worst thing to have. I was gaining knowledge either way. I wasn’t just turning in the solution, we still had to do the problem. I was also really, really bad at that class.

The frequency of this phenomenon—mastery as a reason to cheat—and its alignment to students’ beliefs can be seen in Table 6.9. To summarize:

- Students who said learning was a reason not to cheat (the students who expressed a mastery orientation) were more likely to participate in unpermitted collaboration on homework than not. In addition, they were as likely to work with others when it was not allowed for learning, as they were not cheating at all.
- Students who said grades were reasons to cheat (students who expressed a performance orientation) were the most likely group to participate in unpermitted collaboration on homework, and a majority did so for learning.

- Students who said learning was a reason to cheat engaged in unpermitted collaboration on homework in rates similar to students who said grades were a reason to cheat. In addition, all of them did so for learning.

Many students had strong feelings about the justification they provided for working with others on homework when it was not allowed. Here are two students' opinions:

I think that homework ought to be for the purpose of learning the material, as opposed to a grade. I learn best by doing practice problems. I would rather do them for the sake of learning them, as opposed to doing them for the sake of a grade. A personal opinion of mine is that when teachers assign homework, it should maybe be for bonus points or something. I don't think it should be for a grade. That encourages cheating.

People should consider collaboration less like cheating and more like people learning from each other. If you ask some people to look over what you did before you turn it in, and you look over theirs, and you work with each other to get the best answer, that way you will learn better. I don't see that as cheating. I think that is collaborative learning and I think there should be more of that.

Although these students are expressing similar beliefs, the first student (who made the statement on the left) did not participate in unpermitted collaboration on homework and the second student (on the right) did.

Table 6.9: Summaries of students' responses when asked to prioritize learning or grades, correlated with students' descriptions of whether they participated in unpermitted collaboration on homework

Students described...	Participated in unpermitted collaboration on homework		Participated in unpermitted collaboration on homework & for learning		Did not participate in unpermitted collaboration on homework	
	#	%	#	%	#	%
Learning as a reason not to cheat (12)	7	58%	5	42%	5	42%
Grades as a reason to cheat (6)	5	83%	4	67%	1	17%
Learning as a reason to cheat (5)	4	80%	4	80%	1	20%

#### SUMMARY

In this chapter, I provided a detailed look at the students and their classmates' engagement in academic dishonesty and the influence faculty members have on students' beliefs about the purpose of their coursework. I further analyzed the students' stories about unpermitted collaboration on homework, to see if the students were engaged in learning. I also reconsidered the students' stories through the lens of moral development and goal orientation theories. In the next chapter, I will briefly summarize my findings and my impressions of them.

## **Chapter 7: Discussion**

We have come to the end of my reporting on the students' stories. In the last two chapters, I described students experiences with unpermitted collaboration on homework and how that can lead to academic dishonesty. Now, in this final chapter, I will briefly summarize what I learned. Then, I will share how I believe my findings may benefit students affairs practitioners and researchers. First, I will begin with a summary of my research aim and process.

### **RESEARCH OVERVIEW**

Academic dishonesty has existed as long as has American higher education, and there is an extensive longitudinal, mostly quantitative record of research on it (Gallant, 2008; McCabe et al., 2012; Whitley, 1998). One thing we know from that research is that the most significant increase in cheating since the mid-1960s has been in undergraduate students' participation in unpermitted collaboration on homework (McCabe et al., 2012). It is the most common: 1) Method of academic dishonesty; 2) Form of academic dishonesty for students to believe is trivial or not cheating; and 3) Type of academic dishonesty for students and faculty members to disagree about its severity or whether or not it is cheating (McCabe et al., 2012). This shift mirrors the simultaneous and drastic increase in the use of collaborative learning techniques throughout the U.S. educational pipeline (D. Johnson & Johnson, 2009).

My purpose with this research and paper has been to investigate and report on this phenomenon. My aim was to look at the collision of higher education's very old ways of thinking about and addressing academic dishonesty with students' new and widespread

use of collaborative techniques in their academic and personal lives. I did this through a phenomenological approach, or by learning about and working to understand students' participation in collaborative learning on homework assignments, as well as the contexts within which that participation can become cheating (Seidman, 2013; van Manen, 2014). My goal with this research is to support a purposeful dialogue between students, faculty members, staff members, and administrators on how to create a culture of integrity and also support students' learning and collaborative teams.

#### **UNDERGRADUATES' DESCRIPTIONS OF COLLABORATION ON HOMEWORK, PERMITTED AND UNPERMITTED**

It was unclear to me when I began this research what students' out-of-class collaborations really entailed. While students had informally told me that they had worked together for learning both when it was and was not allowed, and some research indicated that may be the case (Ariely et al., 2012), I still did not understand exactly what that meant: What were students actually doing when they were collaborating? There is very little research on students' out-of-class collaboration, so two of my research questions were aimed at learning about students' collaboration on homework:

Research question #1: How do undergraduates describe their experiences with collaboration with classmates on homework assignments?

Research question #2: How do undergraduates describe their experiences with unpermitted collaboration with classmates on homework assignments?

I used social interdependence theory, or the construct on which collaborative learning is built, to frame my study (D. Johnson & Johnson, 2009). I began with the five attributes that Davidson (2002) found in his review of cooperative and collaborative

learning approaches: 1) an assignment appropriate for collaborative work, 2) a defined group of participants, 3) cooperation around learning, 4) individual responsibility and accountability, and 5) interdependence among participants. For my study I, therefore, looked for participants' descriptions of:

1. Assignments completed through collaboration – Students working outside of class on an assigned, shared learning activity with defined expected outcomes;
2. Groups formed for collaboration – Specified groups in which students played distinct roles or had defined responsibilities and, also, division into sub-groups based on roles or responsibilities;
3. Cooperation around learning – Students' listening to one another and discussing, clarifying, making decisions about, or solving problems related to their shared task;
4. Being responsible for and holding others accountable to a collaborative team – Demonstrations of students taking responsibility for shared academic work and expecting the same of others, and communication of those expectations to the students with which they were working; and
5. Experiences with and beliefs about positive interdependence – Descriptions of and beliefs about their dependence on one another for success, specifically statements about improved attitudes, outcomes, grades, or learning attributed to collaboration on homework.

Through interviews with 12 students I found 29 stories that included all five attributes of collaborative learning (2002). These are the descriptions of students' experiences with permitted and unpermitted collaboration on homework assignments on which I based most of my research results. There were themes within these stories that allowed me to find several frameworks for understanding the students' collaboration on homework (Saldaña, 2013).

**Homework assignments completed through collaboration.** The students told me stories about four types of homework assignments they completed collaboratively: 1) Group projects, papers, and presentations; 2) individual projects, papers, and presentations; 3) homework problems; and 4) exam preparation. For the first two types (projects, papers, and presentations), students needed to create unique deliverables. For the second two (homework problem sets and exam preparation) the students needed the “correct” answer (and submit the same responses). The students used permitted collaboration for all four types of assignments. But, they only took part in unpermitted collaboration on two of the assignment types: homework problems and exam preparation, or the two types of assignments for which they were expected to submit identical completed assignments.

**The formation of groups.** Most of the collaborative groups were organized by students without faculty members’ participation. And, in all the instances in which the faculty member encouraged or recommended collaboration (a little more than a third of the stories the students shared) the students were engaged in permitted collaboration. On the other hand, none of the groups that were engaged in unpermitted collaboration were created due to any faculty expectations or participation.

Additionally, for the groups not assigned by the faculty member, and regardless of whether the collaboration was allowed or not, most of the students met most of their collaborative partners through university-sponsored groups and activities. Many teams I heard about were made up of students who met in learning communities. Some were organized by the university (for example, first year learning communities) or were

organized by or an outgrowth of students' affiliation with an academic unit or program (for example, a degree or certificate program or an honors program). In addition, the student groups were stable and often long-standing. Some students even purposefully registered for the same course sections as collaborative team members, so they could continue their collaborations term to term.

**Cooperation around learning and in support of collaboration.** There were four distinct structures to the students' collaborative work: 1) Primarily collaborative, 2) cooperative and collaborative, 3) parallel and collaborative, and 4) independent and collaborative. The greater the collaboration the more coordination was required of the students, with primarily collaborative work needing the most coordination and the independent and collaborative structure needing the least. The students' collaborative teams were, again, often complex, and long-standing. In addition, the students had distinct roles and responsibilities within their teams, and often brought specialized skills to their roles.

**Responsibility, accountability, and positive interdependence.** The students I talked to accepted and prioritized their commitments to one another within the team, and held one another accountable when needed. In addition, being thought of by others as "reliable" was important to most of them, and most wanted to be a contributing team member. Prior to completing this research, I thought these types of transactional commitments was what "responsibility" meant for collaborative teams. What I found through my research was a much richer, but less precise, definition: The students believed they were responsible for their own and others' learning (not just grades). In



addition, many described powerful teams that they believed they were dependent upon for their academic success. These students explained that their collaboration had improved their learning, the quality of their work, their attitudes about their education, and their grades.

### **COMPARING STUDENTS' PERMITTED AND UNPERMITTED COLLABORATION**

In general, the students' stories of permitted and unpermitted collaboration on homework were similar. But, the experiences the students shared about unpermitted collaboration had less complexity than those they talked about that were allowed. There was less diversity in the type of assignments, their relationships were often shorter- rather than longer-term, the structures of their work with one another was less complex, responsibility for and expected accountability of others was more contractual, and their interdependence was more transactional. Therefore, their stories about unpermitted collaboration were less robust. Nevertheless, I did find that students' collaborations, both permitted and unpermitted, were more complex than I had imagined when I began this work. Of the 29 stories of collaboration on homework that I gathered:

- 19 stories were about permitted collaboration,
- five were about unpermitted collaboration, and
- five were about permitted and unpermitted collaboration in tandem.

I expected when I began this research that I would find that at least some of the students who participated in unpermitted collaboration were engaged in collaborative learning (Ariely et al., 2012; Gallant, 2008). Using Davidson's (2002) framework, I found that to be true. Nevertheless, to be sure, I revisited the stories with a more critical

eye, to determine if the students were truly engaged in learning that had been forbidden.

When doing so, I found that the students who were cheating took part in three types of forbidden behaviors, some of which were aimed at learning and some of which were not:

1. The students who took part in working together on problem sets were all engaged in learning activities that were unpermitted,
2. The students who used additional, unpermitted materials were mostly engaged in learning activities, and
3. The students who manipulated an online homework or testing system were not engaged in learning behaviors.

In other words, for two of the students' forbidden behaviors, I found that, in some of the stories the students were cheating for advantage (not learning). These students were taking part in both permitted collaboration for learning and unpermitted collaboration for advantage. Using this information I was able to focus some of my study on just the stories in which the students' unpermitted collaboration on homework was for learning. This narrowed my research results to seven (of 29) stories in which five (of 12) students were engaged in collaborative learning that had been forbidden by their faculty member.

#### **UNDERGRADUATES' ENGAGEMENT IN UNPERMITTED COLLABORATION ON HOMEWORK**

With this narrower definition, I focused on my last research question:

Research question #3: How do undergraduates describe the situations that influence their engagement in unpermitted collaboration on homework assignments?

First, I looked at the cultural aspects of academic dishonesty and found that, as researchers predicted, faculty members' words and actions can have on students' behaviors (Lang, 2013c; D. L. McCabe, 2016; Spear & Miller, 2012; Young et al., 2017;

Yu, Glanzer, & Johnson, 2017). I also used moral development and goal orientation theories to try to make sense of students' cheating. These two theories are often used to study and respond to academic dishonesty, and researchers that subscribe to each are often critical of the other (Gallant, 2008; Lang, 2013c; McCabe et al., 2012; Murdock & Anderman, 2006). Both moral development and goal orientation theories, as they are applied to higher education today, assume that cheaters do not intend to learn (Gallant, 2008; Lang, 2013c; McCabe et al., 2012). This does not align with my results.

**The role of the faculty member.** Every student in the study described communications from and with faculty members about academic integrity. Also, all the students described being encouraged by faculty members to learn. They had also all been encouraged by faculty members to collaborate with others in support of learning, and they had all been assigned collaborative work. In addition, most of the students said their faculty members had talked to them about unpermitted collaboration on homework, and had provided guidance on the boundaries of permitted collaboration. The students seemed to have had no doubts they understood what their faculty member wanted: They believed their faculty member wanted them to learn. Some students told me they used that knowledge—their faculty member's stated desire for them to learn—when deciding whether to cheat for learning.

**Moral development and academic integrity.** I found it more difficult than I had expected to study the students' moral beliefs and development. This was due, in part, to the way in which the students used moral and ethical language. For example, some students conflated ideas about mastery and morality—they framed learning as ethical

because both were desirable, or good. In addition, some expressed the belief that all difficult decisions were ethical decisions. In other words, students did not always seem to understand or be able to communicate when ethics was a part of their decision-making. Regardless, there was a clear disconnect between what most students said about their values and ethical beliefs and their actions day-to-day regarding cheating. Simply put, all the students used ethical language to describe their decisions about cheating and most also participated in academic dishonesty. That said, two groups of students, on the extremes of beliefs and behaviors, did speak and act with greater consistency and showed alignment with researchers' beliefs about moral development and academic integrity (Bowen, 1997; D. L. McCabe, 2016; McCabe et al., 2012; Nuss, 1988; Pascarella & Terenzini, 2005).

The students whose religiosity and participation in religious activities had increased during college, becoming significant to the students' self-concept, were less likely to be engaged in cheating after that change than they were before it. In addition, also after that change in their faith and church engagement, they were more likely to describe a personal ethical framework that aligned with their decisions related to cheating. These students described engaging in cheating less as their faith developed throughout college, including making purposeful and, for some students, difficult decisions about ending cheating. This aligns with newer research on correlations between increased religiosity, in particular participation in religious activities in college, and lower rates of cheating (Nelson et al., 2017; Rettinger & Jordan, 2005; Scrimshire et al., 2017; Yu, Glanzer, & Johnson, 2017; Yu, Glanzer, Sriram, et al., 2017). On the other end

of the spectrum, a very small number of students participated in ongoing and significant cheating and also broke other university rules. In addition, although these students used ethical language to talk about their beliefs about cheating, the stories they shared and the beliefs they expressed indicated they had less developed ethical frameworks. For example, these students did not express strong ethical values and made excuses (engaged in neutralization) when explaining their actions related to cheating (Spear & Miller, 2012). For these two groups of students, moral develop theory accurately represented their statements and actions more consistently than for the overall participant group (McCabe, 2005a; McCabe et al., 2012). For the remainder of the students, there was little correlation between the students statements and behaviors. This may be a demonstration of Hinman's (2002) "20-60-20 rule": About 20% of students never cheat, another 20% often cheat, and the remaining 60% may or may not cheat, depending on the circumstances (p. 31).

**Goal orientation and academic integrity.** The students' motivation, or goal orientation was (somewhat) easier to discern. As with my investigation into moral development theory, I asked the students about their opinions directly and also considered how their statements and stories (indirectly) demonstrated their beliefs. In our discussions about their goal orientations, the students and I were using the same words in the same way (I asked them about learning and grades, which all students understand). Nevertheless, as with moral develop theory, there was little alignment between the students' statements about cheating being a barrier to learning and most of their cheating behaviors: the majority said learning was a reason not to cheat and also participated in

unpermitted collaboration on homework. I found that students who said they valued learning and also cheated were acting on their values, but just not in the manner in which we would expect (Eric M. Anderman & Tamera Burton Murdock, 2007; Gallant, 2017; Lang, 2013c). While all the students I interview indicated that learning was a reason not to cheat, almost half also said that learning was a reason to cheat. In addition, most of the students who said learning justified cheating participated in academic dishonesty. So, goal orientation theory was also lacking when it came to making sense of unpermitted collaboration on homework.

#### **COMPARING MORAL DEVELOPMENT AND GOAL ORIENTATION FRAMEWORKS**

When I began this study, based on the research record, I expected moral development or goal orientation theory would apply to research into unpermitted collaboration on homework (Eric M. Anderman & Tamera Burton Murdock, 2007; Blum, 2009; Gallant, 2008, 2017; Lang, 2013c; McCabe et al., 2012; Nuss, 1988; Whitley, 1998). But, as you can see from the results I have summarized in Table 7.1, that is not the case. Instead, neither theory described most of the students' decisions about unpermitted collaboration on homework. For most of the students in my study, moral development theory aligned with their beliefs but not their actions. Students who said being ethical was important to them and/or described a demonstration of their ethical decision-making skills also took part in unpermitted collaboration on homework. This is not what is expected from the lens of moral develop theory (Blum, 2009; Gallant, 2008; McCabe et al., 2012; Nuss, 1988; Whitley, 1998). In addition, for many of the students in my study, goal orientation theory also did not apply. While most of the students acted in a manner

that aligned with their stated beliefs, that did not lead to the hoped-for action. Some students with a mastery orientation avoided cheating because of a desire to learn, and others engaged in cheating because of it. This is, again, not what is expected through a goal orientation framework (Eric M. Anderman & Tamera Burton Murdock, 2007; Gallant, 2017; Lang, 2013c).

Table 7.1: Expected cheating behaviors based on moral development and goal orientation theories, compared to most students' actual cheating behaviors

<b>Theoretical Frameworks and Unpermitted Collaboration on Homework</b>	<b>Expected behavior</b>	<b>Actual behavior</b>
<b>Moral development theory</b>		
Students with a strong ethical orientation and decision making-skills are less likely to cheat	True	False
Students with weak ethical orientation and/or poor decision-making skills are more likely to cheat	True	True
<b>Goal orientation theory</b>		
Students with a mastery orientation (or learning) are less likely to cheat	True	False
Students with a performance orientation (or grades) are more likely to cheat	True	True

Notes. Adapted from "Cheating in College: Why Students Do It and What Educators Can Do About It," by D. L. McCabe, K. D. Butterfield, and L. K. Treviño, 2012. Copyright 2012 by John Hopkins University Press, and from "The Psychology of Academic Cheating," edited by E. M. Anderman and T. B. Murdock, 2007. Copyright 2007 by Elsevier Academic Press.

## KEY FINDINGS

There are six key findings from my research that I believe are actionable for student affairs practitioners or researchers. Four findings surfaced through what I learned about students' experiences through their stories. The two remaining findings came from my efforts to try and make sense of the students' experiences through the theories

commonly (moral development and goal orientation theories). These findings encompass ideas about learning and collaboration, the roles of academic communities and faculty members, and the theoretical constructs that guide practice and research.

**Key finding #1: Students engage in unpermitted collaboration on homework for learning.** It seems the old saying: “Cheaters never learn,” does not always apply. The students I interviewed shared stories about their experiences using collaborative learning techniques with classmates on out-of-class assignments and, in five of the 29 stories I gathered, the students’ collaboration was for learning. As with permitted collaboration, the students’ unpermitted collaboration on homework included all the aspects of collaborative learning identified by Davidson (2002) and also learning behaviors that were forbidden by the faculty member. The students overwhelmingly believe in the value of collaborative learning and most engaged with others collaboratively and often for learning. This was expected, based on the success of the implementation of collaborative learning—all American students come to college versed in it (D. Johnson & Johnson, 2009; D. Johnson et al., 2007; Smith & MacGregor, 1992).

**Key finding #2: Students’ collaborative teams can be complex and mature, and the institution has a role in the development of the teams.** As predicted by Davidson (2002) the students’ collaborative learning groups had complex structures, communications, roles, responsibilities, processes, and outcomes. The students’ collaborative teams were typically formed through university-organized learning communities, or through academic programs or departments. The teams formed in a students’ first year (or even semester) through first year onboarding activities, like



learning communities, were particularly long-standing. For example, several students told me stories about groups of students who purposefully engage with one another over multiple semesters, even registering for courses together, to continue work in successful collaborative teams. These teams support learning in multiple ways, one of them being through opportunity for collaboration. The teams also have cultures and processes that either encourage or discourage academic integrity and dishonesty.

**Key finding #3: Students believe their faculty members want them to learn and succeed, and faculty members are an important source of information for students.** Faculty members are communicating with students about learning, academic integrity, and the boundaries of collaboration. And, for the most part, students are listening. Most of the students believed they understood what their professors wanted when it came to working with others on homework: Students believe faculty members want them to learn. When given the opportunity to work collaboratively with others for learning, some students will do that even if it is not allowed. In addition, sometimes these students believe they are following faculty members' guidance.

**Key finding #4: Students make purposeful decisions about taking part in academic dishonesty, and some students based those decisions on a desire to learn.** The students I interviewed, for the most part, did not accidentally engage in unpermitted collaboration on homework. Instead, they made conscious decisions about whether or not to cheat. Their decision-making included recalling information from the faculty member, discussions with other students, calculations about the possibility of discovery, and consideration of the opportunities to learn with and without engaging in cheating. In

addition, most students reported only accepted a fraction of the opportunities they had to cheat.

**Key finding #5: Unpermitted collaboration on homework is described by students within the context of moral development theory, but for most students their stated beliefs do not align with their actions.** For many of the students, decisions about cheating were central to their ethical decision-making experiences in college. Yet, despite many indicators that most of the students wanted to and did act ethically in most situations, most of the students still cheated, and many by participating in unpermitted collaboration on homework.

**Key finding #6: Goal orientation theory does not describe unpermitted collaboration on homework, as some students engage in academic dishonesty for the purpose of learning.** Setting aside the online question and answer system that students disliked, due to its lack of feedback and high-stakes grading schema, the students I interviewed believed that homework supported learning and improved their grades by helping them to prepare for higher-stakes assessments. Within that culture, where homework is valued for its learning benefit, I found that the students with a mastery orientation were more likely to engage in academic dishonesty, including unpermitted collaboration for the purpose of learning, than they were to be academically honest.

## **RECOMMENDATIONS**

At the conclusion of my research study, I believe that everyone is trying to do the right thing. Students are trying to learn and succeed in school, and faculty members are trying to facilitate learning and accurately assess students' understanding. In addition,

institutions have worked to create processes and structures aimed at encouraging integrity. The students, faculty members, and the institution share the same value: their priority is learning. But there is a disconnect between that shared goal and students' actions in comparison to the faculty members' and administrators' expectations. I believe this may be due to two assumptions we have about students working and cheating together. First, we may be underestimating the consistency of practice of the students' out-of-class learning. The boundaries for collaboration can be specific to the department, term, section, or even assignment. Within this environment of ever-changing rules, the students described teams that function as do the workplace teams I have been a part of: members bring the same relationships, skills, and knowledge to different problems and projects. Therefore, the members of the collaborative teams engaged with one another similarly, regardless of whether or not working together was permitted. In other words, the teams were just doing what they are doing (working together collaboratively on homework), and sometimes that was cheating and sometimes it was not, due to variations in course or assignment rules. These observations shape my recommendations for practice.

And second, our ability to address students' cheating is limited by our inability to identify a theoretical construct that can help us make sense of students unpermitted collaboration on homework for learning. Research into and programs addressing academic cheating have been framed by moral development theory for generations (Bowers, 1964; Gallant, 2008; D. L. McCabe, 2016; Wilson, 1905) but yet, as noted in my first sentence many pages ago, students' rates of cheating have remained unchanged

for decades, regardless of our efforts to stop it (Bowers, 1964; McCabe et al., 2012; McCabe & Treviño, 1993; Whitley, 1998). The results of my study show that neither moral development theory nor goal orientation theory may be meaningful frameworks for studying unpermitted collaboration. These observations shape my recommendations for research.

**Recommendations for practice.** Many of the students' collaborative groups had been created under the auspices of the institution. In addition, many had been longstanding when I heard about them. We have opportunities, through these types of groups, to shape the institutions' culture and support students' decision-making processes related to collaboration and cheating. In addition, the students' collaborative teams' and their processes, including students' roles and responsibilities, were frequently stable and consistent in the students' stories.

***Recommendation for practice #1: Acknowledge and adjust assumptions about students' intentions when engaged in unpermitted collaboration on homework.*** The primary take-away from my study that I believe will improve practice is that we must abandon our belief that students who are cheating do not intend to learn. Instead, we should acknowledge that students can do the wrong thing for the right reason, and students, faculty members, and administrators should all work to understand one another's academic intentions and goals and seek clarity in our shared language, values, and goals when talking about cheating and collaboration on homework.

***Recommendation for practice #2: Develop policies specific to this form of academic dishonesty.*** We should design our integrity policies to account for the good

intentions (learning) of the students who are engaging in bad behavior (cheating). We have found ways within the higher education community to think about and address plagiarism differently than we do other forms of cheating. For example, we are more likely to believe a first-time plagiarist did not understand he/she was cheating, and assign education rather than punishment when the student gets caught. We should create programming specific to addressing unpermitted collaboration on homework that similarly guides students in appropriate decision-making processes for use when they have decisions to make about opportunities for collaboration on homework.

***Recommendation for practice #3: Create shared definitions and norms within student learning communities, and begin the conversation about academic integrity within first year student programs and programming.*** The relationships students formed during onboarding programs provided by the institution or academic departments became, for many of them, collaborative partners or teams that they returned to throughout their time in college. We should use these same groups—residential and departmental learning communities, honors programs, degree and certificate programs, tutoring center programs, and similar—to communicate with students the institution’s values and expectations and teach common decision-making processes, including ethical decision-making, related to collaboration, homework, and cheating.

***Recommendation for practice #4: Create and education students and faculty members on a campus-wide decision-making framework based on their shared goal of student learning, and develop institutional expertise in communicating this framework.*** Reframe both students’ and faculty members’ decision-making related to collaboration

around prioritizing learning. Educate faculty members on the value of collaborative learning and develop faculty members' skills in designing and assessing collaborative assignments. The focus should be on integrating collaboration into assignments when it supports learning and forbidding it when it does not. If faculty members use the framework when designing assignments, and the students use the same framework when they encounter opportunities to work collaboratively with classmates, students will be more likely to make decisions and act in ways that align with faculty members' expectations. In addition, the more we align students' decisions with faculty members' expectations about collaboration and learning, the more consistency we will create in faculty members' rules and students' teams' collaborative norms across campus.

***Recommendation for practice #5: Develop faculty members' knowledge about collaborative learning, and skills in creating and assessing collaborative work.***

Engaging faculty members and faculty communities is required if we want to successfully create a community of scholars with the shared values, understanding, and language needed to create a meaningful dialogue about decision-making processes related to collaboration and learning on homework.

**Recommendations for research.** The students I interviewed were making purposeful and complex decisions about learning, cheating, and collaborating but those decision-making processes are not resulting in the outcomes we expect. Neither students' values (using moral development theory) nor motivation (using goal-orientation theory) accurately predicted most of the students' engagement in unpermitted collaboration on homework. Instead, students are making decisions based on a desire to learn, and that can

lead to academic integrity or academic dishonesty. Because of this, we must align our research agenda with our shared goal of student learning, and find ways to support students' decision-making about learning, collaboration, and academic integrity.

***Recommendation for research #1: Develop an understanding of students' independent collaborative learning.*** I encourage additional research into students' collaborative work with one another. An improved understanding of their work together will help us to create cultures of integrity within their teams, and also a shared framework to support students in making decisions about collaboration that align with their faculty members' intentions. In addition, I recommend continued research on the impact of faculty members' communications with students on their decisions about cheating, learning, and collaboration.

***Recommendation for research #2: Develop a more nuanced research agenda on students' unpermitted collaboration on homework.*** Researchers should create a research stream aimed at this specific form of cheating. As with plagiarism, we should take students' intentions into account when studying unpermitted collaboration on homework. In addition, we should further develop both the qualitative and quantitative research record on unpermitted collaboration on homework. Qualitative data will help us to continue to work to understand this phenomenon, where quantitative data will continue to allow us to track its frequency.

***Recommendation for research #3: Identify appropriate theories to study (and address) unpermitted collaboration on homework.*** The assumptions and frameworks that we frequently apply to our study of academic dishonesty, specifically moral

development and goal orientation theories, do not align with the stories the students told me about their decisions about and engagement in unpermitted collaboration on homework. We must, therefore, identify a new theory or theories that can help us to make sense of students' behaviors and decision-making.

**Limitations.** This study was conducted at a large, highly selective institution and was qualitative, so its results cannot be generalized to other institutions or students. It was also relatively small (just 12 students). Despite this, and to demonstrate that I found few correlations in the data, I have provided quantitative data on the students' engagement in the form of academic dishonesty that made up the study's key threads of inquiry. "Collaborative learning," and "academic dishonesty" were clearly and narrowly defined. The study did not include students' involvement in other forms of collaboration or collaborative cheating. The study focused on students' reports of and reflections on personal experiences with working collaboratively on completing low-stakes, graded, academic tasks that were primarily intended to reinforce, rather than assess, learning. In addition, I set out to describe the phenomenon, not to devise ways to influence it. That said, there are some findings that may be helpful to others working to understand this phenomenon for practical or research purposes. Finally, phenomenological research does not result in new theory (Moustakas, 1994).

## CONCLUSION

The goal of this study was to understand the experiences of students taking part in the most common form of learning and also the most common form of cheating at today's universities (D. Johnson & Johnson, 2009; McCabe et al., 2012). This type of



research was needed, as the increase in unpermitted collaboration on homework is significant and a concern on most college campuses. The exploratory nature of the study generated an in-depth description of students' engagement in the phenomenon. The descriptive approach brought depth to our understanding of this common form of academic dishonesty. The research results also provide rich detail about the contexts of the experiences of students working together on homework assignments, and demonstrates the disconnects between our beliefs about students' intentions and actions in comparison to their purpose in their collaborative work.

To many of the students I interviewed, collaboration is so deeply embedded in their belief systems about how learning happens that they work together collaboratively repeatedly, whether it is allowed or not. They value collaborative learning and are adept at it. They believe collaboration supports their learning, and also believe the same about homework. In addition, they believe their faculty members share their commitment to learning. This is the framework within which students make decisions about collaboration and academic integrity—the decisions they call “ethical” decisions, but which are really often decisions about learning.

To support students making decisions about cheating and learning within this framework, I recommend a new dialogue within the academic community aimed at creating a common language around and understanding about academic integrity, collaboration, and homework. If we can create a shared understanding among students and faculty members about what collaboration is and what learning is we can create a community where collaboration for learning is recognized and valued, and collaborative

groups are discouraged from working together for solely for grades (rather than for learning). This work should include identifying an appropriate theoretical frame for continued investigation.

In closing, in conducting this research I have done my best to accurately represent the beliefs and experiences of the students who generously shared their time and perspectives with me. They were inspiring. The results of my research project have deepened my appreciation for students' skills and resilience and faculty members' creativity and commitment to students' success. This experience has reminded how fortunate I am to have had the opportunity to spend my professional life as a member of a community of scholars.

## Appendices

## Appendix A: Institutional Review Board Approval



OFFICE OF RESEARCH SUPPORT

THE UNIVERSITY OF TEXAS AT AUSTIN

P.O. Box 7426, Austin, Texas 78713 - Mail Code A3200  
(512) 471-8871 - FAX (512) 471-8873

FWA # 00002030

Date: 01/23/15

PI: Patricia A Somers

Dept: Educational Administration

Title: Undergraduate Engagement in Permitted and Unpermitted  
Collaboration on Homework Assignments

Re: IRB Exempt Determination for Protocol Number 2014-11-0004

Dear Patricia A Somers:

Recognition of Exempt status based on 45 CFR 46.101(b)(2).

Qualifying Period: 01/23/2015 to 01/22/2018. *Expires 12 a.m. [midnight] of this date.*

A continuing review report must be submitted in three years if the research is ongoing.

### Responsibilities of the Principal Investigator:

Research that is determined to be Exempt from Institutional Review Board (IRB) review is not exempt from ensuring protection of human subjects. The Principal Investigator (PI) is responsible for the following throughout the conduct of the research study:

1. Assuring that all investigators and co-principal investigators are trained in the ethical principles, relevant federal regulations, and institutional policies governing human subject research.
2. Disclosing to the subjects that the activities involve research and that participation is voluntary during the informed consent process.
3. Providing subjects with pertinent information (e.g., risks and benefits, contact information for investigators and ORS) and ensuring that human subjects will voluntarily consent to participate in the research when appropriate (e.g., surveys, interviews).
4. Assuring the subjects will be selected equitably, so that the risks and benefits of the research are justly distributed.
5. Assuring that the IRB will be immediately informed of any information or unanticipated problems that may increase the risk to the subjects and cause the category of review to be reclassified to expedited or full board review.

## Appendix A (continued)

Re: IRB Exempt Determination for Protocol Number 2014-11-0004  
Page 2 of 2

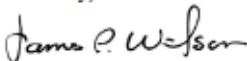
6. Assuring that the IRB will be immediately informed of any complaints from subjects regarding their risks and benefits.
7. Assuring that the privacy of the subjects and the confidentiality of the research data will be maintained appropriately to ensure minimal risks to subjects.
8. Reporting, by submission of an amendment request, any changes in the research study that alter the level of risk to subjects.

These criteria are specified in the PI Assurance Statement that was signed before determination of exempt status was granted. The PI's signature acknowledges that they understand and accept these conditions. Refer to the Office of Research Support (ORS) website [www.utexas.edu/irb](http://www.utexas.edu/irb) for specific information on training, voluntary informed consent, privacy, and how to notify the IRB of unanticipated problems.

1. Closure: Upon completion of the research study, a Closure Report must be submitted to the ORS.
2. Unanticipated Problems: Any unanticipated problems or complaints must be reported to the IRB/ORS immediately. Further information concerning unanticipated problems can be found in the IRB Policies and Procedure Manual.
3. Continuing Review: A Continuing Review Report must be submitted if the study will continue beyond the three year qualifying period.
4. Amendments: Modifications that affect the exempt category or the criteria for exempt determination must be submitted as an amendment. Investigators are strongly encouraged to contact the IRB Program Coordinator(s) to describe any changes prior to submitting an amendment. The IRB Program Coordinator(s) can help investigators determine if a formal amendment is necessary or if the modification does not require a formal amendment process.

If you have any questions contact the ORS by phone at (512) 471-8871 or via e-mail at [orsc@uts.cc.utexas.edu](mailto:orsc@uts.cc.utexas.edu).

Sincerely,



James Wilson, Ph.D.  
Institutional Review Board Chair

## Appendix B: Participant Recruitment Announcement



### Volunteer: Study on Collaborative Learning on Homework Needs Participants

Undergraduate students who have worked together on homework assignments are needed for a study on students' experiences. Participants will take part in two interviews about collaboration on out-of-class learning when completing homework assignments. Email graduate student Lori McNabb at [lori.r.mcnabb@gmail.com](mailto:lori.r.mcnabb@gmail.com) for information or to get started.

🕒 Thursday, October 1, 2015

#### EVENT TYPE

Research Opportunities & Studies

#### DEPARTMENTS

All Departments

#### NOTICES

Volunteer

#### RESEARCH OPPORTUNITIES

Unpaid


#### TARGET AUDIENCE

Students

#### SUBSCRIBE

G 📅 🕒

## Appendix C: Additional Institutional Review Board Approval

 **Gmail**

Lori McNabb <lori.r.mcnabb@gmail.com>

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**Revised Proposal, 2014-11-0004**  
2 messages

---

**Lori R. McNabb** <lori.r.mcnabb@gmail.com> Tue, Jul 28, 2015 at 1:07 AM  
To: "Hammock, Meghan A" <mhammock@austin.utexas.edu>

Dear Ms. Hammock,

I'm writing about my dissertation study, number 2014-11-0004. I've uploaded a revised copy of my proposal to the IRB Access system.

I've not been able to use the Know Events emails for recruiting, as I'd hoped. The email system has not been working this summer. In addition, I've not gotten the diversity I would have liked regarding the students' academic departments. So, I'd like to use posters, and will hang them in the areas of campus from which I'd like more students. I've edited (and highlighted) the proposal on page 5 to indicate this, and have included the proposed poster on page 23 (Appendix I).

When reading through the proposal again to make the edits, I found the following that also needed updating:

- The study timeline (page 3), which will still be completed within the two years that was approved.
- I had indicated that I might provide compensation, but are not (page 6).

I hope these changes are acceptable.

Thank you. - Lori McNabb, 512-673-8122

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**Hammock, Meghan A** <mhammock@austin.utexas.edu> Tue, Jul 28, 2015 at 2:25 PM  
To: "Lori R. McNabb" <lori.r.mcnabb@gmail.com>

Dear Lori McNabb,

Thank you for your notification of the changes to the protocol study listed above. The proposed changes to the protocol have been acknowledged as not increasing the risk toward study participants and still fall under exempt status. I will place a copy of this communication in the folder for this protocol to keep the study up to date. You can continue with your research.

Best wishes,

Meghan Hammock

## Appendix D: Participant Recruitment Poster

Have you worked with  
other students on  
homework assignments?  
**Tell Me About It.**

★

**Students Needed for Study on Collaborative  
Learning on Out-of-Class Assignments**

★

**See [www.lori.link/ut-study](http://www.lori.link/ut-study) for more information**

Undergraduate students who have worked together  
on homework assignments are needed for a study on  
students' experiences with collaborative  
learning. Volunteer participants will take part in two  
interviews about collaboration on homework  
completing homework assignments.

**Students Needed for Study on Collaborative  
Learning on Out-of-Class Assignments**

Study on Collaboration <a href="http://www.lori.link/ut-study">www.lori.link/ut-study</a>	Study on Collaboration <a href="http://www.lori.link/ut-study">www.lori.link/ut-study</a>	Study on Collaboration <a href="http://www.lori.link/ut-study">www.lori.link/ut-study</a>	Study on Collaboration <a href="http://www.lori.link/ut-study">www.lori.link/ut-study</a>	Study on Collaboration <a href="http://www.lori.link/ut-study">www.lori.link/ut-study</a>	Study on Collaboration <a href="http://www.lori.link/ut-study">www.lori.link/ut-study</a>	Study on Collaboration <a href="http://www.lori.link/ut-study">www.lori.link/ut-study</a>	Study on Collaboration <a href="http://www.lori.link/ut-study">www.lori.link/ut-study</a>
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## **Appendix E: Email to Potential Participants**

<Date>

Dear <Student's First Name>,

My name is Lori McNabb, and I am a doctoral student in the College of Education at the University of Texas at Austin.

I am writing to ask for your help.

I am interested in your experiences with collaborating with your classmates on homework assignments. I'm looking for undergraduate students who have worked collaboratively with other students on out-of-class assignments that were assigned by an instructor in support of learning. If this describes you, I hope you'll tell me about it.

Will you participate in two one-hour interviews during the next month? If so, please complete the three-minute survey at <Qualtrics Survey Link>. Alternatively, feel free to email me at <email address>, or text or call me at <phone number>. You need to have attended the university at least two semesters. In addition, you'll have to allow me to record and transcribe the interviews, and use what I learn in my dissertation and any subsequent publications. (But you will remain anonymous.)

Thank you!

Lori McNabb  
Doctoral Student, College of Education  
The University of Texas at Austin  
lori.r.mcnabb@gmail.com  
512.673.8122

## Appendix F: Online Informed Consent Form

Study Number: 2014-11-0004

Approval Date: 01/23/15

Expires: 01/22/18

### Consent for Participation in Research

#### Undergraduate Participation in Permitted and Unpermitted Collaboration on Homework Assignment

**Introduction:** The purpose of this form is to provide you information that may affect your decision as to whether or not to participate in this research study. The person performing the research will answer any of your questions. Read the information below and ask any questions you might by emailing Lori McNabb at [lori.r.mcnabb@gmail.com](mailto:lori.r.mcnabb@gmail.com) before deciding whether or not to take part. If you decide to be involved in this study, this form will be used to record your consent.

**Purpose of the Study:** You have been asked to participate in a research study about your experiences with collaborative learning outside of class. The purpose of this study is to understand students' experiences with working together collaboratively on homework assignments. These experiences may be permitted (allowed by your teacher) or unpermitted (academic dishonesty, or possible academic dishonesty).

**What will you be asked to do?** If you agree to participate in this study, you will be asked to

- Complete an online pre-interview questionnaire (3-8 minutes),
- Participate in two (2) interviews (60-75 minutes each),
- Review and provide feedback on two (2) interview transcripts (15-45 minutes each).

This study will take between two and one-half (2.5) hours and four (4) hours and will include approximately twenty (20) study participants. Your participation will be audio recorded.

**What are the risks involved in this study?** There are no foreseeable risks to participating in this study.

## Appendix F (continued)

**What are the possible benefits of this study?** You will receive no direct benefit from participating in this study. However, you may enjoy reflecting on your experiences or helping to advance academic research about students' experiences in higher education.

**Do you have to participate?** No, your participation is voluntary. You may decide not to participate at all or, if you start the study, you may withdraw at any time. Withdrawal or refusing to participate will not affect your relationship with The University of Texas at Austin (University) in anyway. If you would like to participate, please agree below, and complete the pre-interview questionnaire that begins on the next page. You will receive a copy of the information on this form at your first interview.

**Will there be any compensation?** Participants will not be compensated.

**How will your privacy and confidentiality be protected if you participate in this research study?** You will use a pseudonym to protect your anonymity, and all communications with you will be confidential. The records of this study will be stored securely and kept confidential. You will be asked to read and correct the transcripts of your interviews, and the audio recordings will be destroyed afterward. The data collected will be maintained securely for three years, after which it will be destroyed. Data will not be shared with other researchers or with representatives of the University. Publications will exclude any information that would make it possible to identify you. If it becomes necessary for the Institutional Review Board to review the study records, information that can be linked to you will be protected to the extent permitted by law. Your research records will not be released without your consent unless required by law or a court order.

**Whom to contact with questions about the study?** Prior, during, or after your participation you can contact the researcher, Lori McNabb at (512) 673-8122 or send an email to [lori.r.mcnabb@gmail.com](mailto:lori.r.mcnabb@gmail.com) for any questions or if you feel that you have been harmed.

**Whom to contact with questions concerning your rights as a research participant?** For questions about your rights or any dissatisfaction with any part of this study, you can contact, anonymously if you wish, the Institutional Review Board by phone at (512) 471-8871 or email at [orsc@uts.cc.utexas.edu](mailto:orsc@uts.cc.utexas.edu).

## Appendix F (continued)

**Participation** You have been informed about this study's purpose, procedures, possible benefits and risks, and you will receive a copy of this form (or can print or save it now). You have been given the opportunity to ask questions before you sign, and you have been told that you can ask other questions at any time. You voluntarily agree to participate in this study. By agreeing, you are not waiving any of your legal rights.

---

**Please click “Agree” below to participate, and then on the arrow (below, on the right) to submit your response.**

Agree (proceed to contact form and questionnaire)

Do not agree (leave survey)

Get more information (email the researcher)

>>

## Appendix G: Online Pseudonym Selection and Contact Form

### **Select a Pseudonym to Assure Your Anonymity**

*You will be anonymous in this research project, and will be referred to by a pseudonym (a fictitious name).*

Please choose a first and last name to use for this study. Please be sure to change your last name, to assure your anonymity. **Remember this pseudonym!** It will be used to communicate with you about the survey.

### **Your Preferred Method(s) of Contact (Please Indicate All that Apply)**

*Your contact information will be kept separate from your survey and interview responses, and will be destroyed at the completion of the study.*

Email me at:

Call me at:

Text me at:

## Appendix G (continued)

Please submit this survey by clicking on the arrow on the lower right of this page.

Thank you! I'll be in touch.

Lori McNabb

[lori.r.mcnabb@gmail.com](mailto:lori.r.mcnabb@gmail.com)



## Appendix H: Online Pre-Interview Survey

**Thank you for your help! Please provide your pseudonym (your name for the study) and some additional information about yourself. Please feel free to skip any questions you'd like.**

---

### What is Your Pseudonym?

The name you've  
selected for this study:

---

### Information about You

Your age:

Your gender:

Your ethnicity:

---

### Information about Your Experiences at this Institution

First semester enrolled

Classification

Expected graduation

Major(s)

College(s)

## Appendix H (continued)

### Your Participation in Collaboration on Homework Assignments (at this Institution)

Collaboration is when students work together to learn. While enrolled at this university, have you collaborated with a classmate or classmates on one more more homework assignments?

Yes

No

### Your Involvement at this Institution

Do you participate in the following activities?

Student government:

No

Yes

Yes, in a leadership position

Academic support (tutoring, etc.)

No

Yes

Yes, in a leadership position

Faculty classroom support (teaching assistant, etc.)

No

Yes

Yes, in a leadership position



## Appendix H (continued)

Research:	No	Yes	Yes, in a leadership position
Greek life:	No	Yes	Yes, in a leadership position
University-wide clubs or organizations:	No	Yes	Yes, in a leadership position
College-wide clubs or organizations:	No	Yes	Yes, in a leadership position
Department clubs or organizations:	No	Yes	Yes, in a leadership position
Field-specific (academic) organizations:	No	Yes	Yes, in a leadership position
Social justice organizations:	No	Yes	Yes, in a leadership position

## Appendix H (continued)

Religious organizations:	No	Yes	Yes, in a leadership position
Residential life:	No	Yes	Yes, in a leadership position
Athletics:	No	Yes	Yes, in a leadership position
Intermural athletics:	No	Yes	Yes, in a leadership position
Fine arts (music, theater, art):	No	Yes	Yes, in a leadership position
Other organizations or activities	No	Yes	Yes, in a leadership position

---

**Please submit this survey by clicking on the arrow on the lower right of this page.**

**Thank you!**

Lori McNabb

## **Appendix I: Informed Consent Form**

### **IRB USE ONLY**

Study Number: 2014-11-0004

Approval Date: 01/23/15

Expires: 01/22/18

Name of Funding Agency (if applicable): n/a

### **Consent for Participation in Research**

#### **Title: Undergraduate Participation in Permitted and Unpermitted Collaboration on Homework Assignments**

##### **Introduction**

The purpose of this form is to provide you information that may affect your decision as to whether or not to participate in this research study. The person performing the research will answer any of your questions. Read the information below and ask any questions you might have before deciding whether or not to take part. If you decide to be involved in this study, this form will be used to record your consent.

##### **Purpose of the Study**

You have been asked to participate in a research study about your experiences with collaborative learning outside of class. The purpose of this study is understand students' experiences with working together collaboratively on homework assignments. These experiences may be permitted (allowed by your teacher) or unpermitted (academic dishonesty, or possible academic dishonesty).

##### **What will you be asked to do?**

If you agree to participate in this study, you will be asked to

- Complete an online pre-interview questionnaire (3-8 minutes),
- Participate in two (2) interviews (60-75 minutes each),
- Review and provide feedback on two (2) interview transcripts (15-45 minutes each).

This study will take between two and one-half (2.5) hours and four (4) hours. and will include approximately ten (10) study participants. Your participation will be audio recorded.

##### **What are the risks involved in this study?**

There are no foreseeable risks to participating in this study.

## **Appendix I (continued)**

### **What are the possible benefits of this study?**

You will receive no direct benefit from participating in this study; however, you may enjoy reflecting on your experiences or helping to advance academic research about students' experiences in higher education.

### **Do you have to participate?**

No, your participation is voluntary. You may decide not to participate at all or, if you start the study, you may withdraw at any time. Withdrawal or refusing to participate will not affect your relationship with The University of Texas at Austin (University) in anyway.

If you would like to participate, please sign this form and provide it to Lori McNabb. You will receive a copy of this form.

### **Will there be any compensation?**

You will not receive any type of payment participating in this study.

### **How will your privacy and confidentiality be protected if you participate in this research study?**

Your privacy and the confidentiality of your data will be protected. The records of this study will be stored securely and kept confidential. The interview sessions will be audio recorded, and the files will be coded so that no personally identifying information will be visible on them. The recordings will be kept in an encrypted file folder on the principal investigator's computer. They will be destroyed when they have been accurately transcribed and coded to protect your confidentiality. All publications will exclude any information that will make it possible to identify you. All data collected for the study will be maintained securely for three years after the close of the study, and will then be destroyed.

If it becomes necessary for the Institutional Review Board to review the study records, information that can be linked to you will be protected to the extent permitted by law. Your research records will not be released without your consent unless required by law or a court order. The data resulting from your participation may be made available to other researchers in the future for research purposes not detailed within this consent form. In these cases, the data will contain no identifying information that could associate it with you, or with your participation in any study.

If you choose to participate in this study, you will be audio recorded. Any audio recordings will be stored securely and only the research team will have access to the recordings. Recordings will be kept for no more than 90 days and then erased.

## **Appendix I (continued)**

### **Whom to contact with questions about the study?**

Prior, during or after your participation you can contact the researcher, Lori McNabb at 512/673-8122 or send an email to lori.r.mcnabb@gmail.com for any questions or if you feel that you have been harmed.

### **Whom to contact with questions concerning your rights as a research participant?**

For questions about your rights or any dissatisfaction with any part of this study, you can contact, anonymously if you wish, the Institutional Review Board by phone at (512) 471-8871 or email at orsc@uts.cc.utexas.edu.

### **Participation**

If you agree to participate **[insert instructions for returning the signed forms]**.

### **Signature**

You have been informed about this study's purpose, procedures, possible benefits and risks, and you have received a copy of this form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask other questions at any time. You voluntarily agree to participate in this study. By signing this form, you are not waiving any of your legal rights.

---

Printed Name

---

Signature

---

Date

As a representative of this study, I have explained the purpose, procedures, benefits, and the risks involved in this research study.

---

Print Name of Person obtaining consent

---

Signature of Person obtaining consent

---

Date

## Appendix J: Final First Interview Protocol

### Collaboration on Homework – Interview One

Our focus in this interview is your personal history and educational experiences.

1. Please briefly tell me about yourself. Tell me about your family, your high school, and life events that shaped who you are today.
  - a. *Where did you go to high school and what was it like? How did high school prepare you for college?*
  - b. *What drew you to your major?*
2. What is the greatest benefit of higher education?
3. What values were most important to your family? How have these values impacted your decisions at college?
4. Please describe yourself as a student.
  - a. *What kind of student are you?*
  - b. *How do you learn?*
  - c. *What are your strengths and weakness as a student?*
5. How do faculty members, your classmates, or others at the university help you to learn?
6. Please tell me about your experiences at the university, including your classes, teachers, friends, activities and housing, and how they have influenced you.
  - a. *Describe your most important classroom experiences.*
  - b. *Describe the most valuable relationships you have on campus.*
  - c. *How do you spend your time?*
7. How have you learned outside of class?
8. Which is more important at the university: learning or getting a good grade? How do you feel about that?
9. Please tell me about what you expect to accomplish in college, and how you believe doing so will affect your life.
  - a. *What are your personal goals for your time at the university?*
  - b. *What challenges are there for you in reaching your goals?*
  - c. *How will reaching the goals you've set for yourself affect your life?*
10. Please reflect on how you've applied your personal values to decisions you've made while in college.
11. Describe any ethical decisions you've made during your time at the university. How did you go about making those decisions? What were your priorities when you were making these decisions?
  - a. *What have you learned from your experiences with ethical decision making while at the university?*

Lori McNabb • [lori.r.mcنabb@gmail.com](mailto:lori.r.mcنabb@gmail.com) • 512.673.8122

## Appendix K: Final Second Interview Protocol

### Collaboration on Homework – Interview Two

Our focus in this interview is on your experiences working collaboratively with your classmates on out-of-class assignments.

**Collaborative learning happens when students 1) work cooperatively, 2) believe they will only be successful if the others with which they are working are also successful, 3) feel they are responsible for one another's learning.**

Please reflect on your experiences with collaborative learning (as described above) when working with others on homework.

1. Think of the times you've worked collaboratively on a homework assignment with another student or students. Walk me through it step-by-step.
  - a. What types of assignments have you worked on collaboratively?
  - b. How did you begin to work together?
  - c. Describe the group.
  - d. How many students were involved?
  - e. What roles did each of you have, and how did those roles come about?
  - f. How did you go about working together to complete the assignment?
  - g. What were your responsibilities to the group?
  - h. Did each student fulfill his or her commitment to the team?
  - i. How did you hold one another accountable for fulfilling your responsibilities?
  - j. What was the outcome of working together with others?
2. What personal values came into play during your time working on homework with others?
3. Describe any ethical decisions you've made regarding working together with others on homework. How did you go about making those decisions? What were your priorities?
4. How did your collaborative group know what was allowed by your professor or the university when you were working together?
5. Have you ever been unsure about whether you were allowed to be working together? Tell me about it. How did you resolve your uncertainty?
6. Have you worked together on homework when it wasn't allowed? How did that happen?
7. What, if anything, have your faculty members done or said to encourage or discourage students working collaboratively on homework assignments?
8. How have you and your classmates determined what was and wasn't acceptable when working together?
9. Have you worked with others on homework and been unsure, at the time or afterwards, whether you were breaking the class or university rules? If so, tell me about it. How did it happen?
10. Have you worked with others on homework knowing it was academic dishonesty? If so, can you tell me about it? How did it happen?

Lori McNabb • [lori.r.mcnebb@gmail.com](mailto:lori.r.mcnebb@gmail.com) • 512.673.8122

**Appendix L: Matrix Showing Initial Alignment of the Study's Interview Questions  
with it Research Questions**

Interview Questions		Background	Collaboration	Unpermitted Collaboration
Interview protocol 1				
1a	Where did you go to high school and what was it like? How did high school prepare you for college?	×		
1b	What values were most important to your family?	×		×
1c	What is the greatest benefit of higher education?	×		×
1d	How did you come to study <field of study> at UT Austin?	×		
2a	What kind of student are you?	×		
2b	How do you learn?	×	×	
2c	What are your strengths and weakness as a student?	×		
2d	How do the university, faculty members, your classmates, or others at the university help you to learn?	×	×	
3a	Describe your most important classroom experiences.	×		
3b	How have you learned outside of class?	×	×	×
3c	Describe the most valuable relationships you have on campus.	×		
3d	How do you spend your time?	×		
3e	Which is more important at UT: learning or getting a good grade? How do you feel about this?	×		
4a	What are your personal goals for your time at UT?	×		
4b	What challenges are there for you in reaching your goals?	×		
4c	How will reaching the goals you've set for yourself affect your life?	×		
5a	Describe any ethical decisions you've made during your time at UT. How did you go about making those decisions?	×		×
5b	What were your priorities when you were making these decisions?	×	×	×



**Appendix L (continued)**

5c	What have you learned from your experience with ethical decision making while at UT?	×		
5d	How do you describe academic dishonesty?	×		
<b>Interview Protocol 2</b>				
1a	Personal example: How did you begin to work together?		×	
1b	Personal example: What roles did each of you have, and how did those roles come about?		×	
1c	Personal example: How did you go about working together to complete the assignment?		×	
1d	Personal example: Did each person fulfill his or her commitment to the team?		×	
1e	Personal example: What was the outcome of working together with others?			
2a	What was your personal goal or goals when working with others on homework assignments?		×	
2b	Were you more successful working together than you would have been if you'd worked alone?		×	×
2b	What is "success" when it comes to homework assignments?	×	×	
2c	How does working with others on homework affect your grade?		×	×
2d	How does working with others on homework help you to learn?		×	×
3a	What personal values came into play during your time working on homework with others?		×	×
3b	Describe any ethical decisions you've made regarding working together with others on homework. How did you go about making those decisions? What were your priorities?		×	×
3c	What, if anything, have your faculty members done or said to encourage or discourage students working collaboratively on homework assignments?		×	×
3d	How have you and your classmates, when working together on homework, determined what was and wasn't acceptable regarding and when working together?	×		×

## Appendix L (continued)

3e	Have you worked with others on homework and been unsure, at the time or afterwards, whether you were breaking the class or university rules? If so, tell me about it. How did it happen?		×
3f	Have you worked with others on homework knowing it was academic dishonesty? If so, can you tell me about it? How did it happen?	×	×
4a	How do you describe academic dishonesty?	×	
4b	How does a student know what is and is not academic dishonesty?		×
4b	Do you feel you know what is expected of you in each of your classes regarding academic dishonesty?	×	×
4c	How widespread is academic dishonesty at UT?		×
4d	Describe your experiences with academic dishonesty at UT.	×	×

## **Appendix M: Initial Codes**

Academic dishonesty/cheating  
Academic integrity programming  
Accountability to group  
Assignment description  
Cheating  
Classmates/Peers  
Collaboration  
Collaborative group  
Collaborative learning  
Communications  
Cooperation  
Course culture/university culture  
Definition/social construction  
Ethical decision-making  
Ethics/morality/values  
Faculty members  
Family  
Friends  
Goal(s)  
Goal interdependence  
Group/team  
High school/other educational environments  
In-class work  
Interdependence  
Learning  
Mastery orientation  
Performance orientation  
Responsibility to group  
Study behavior/technique  
Unpermitted collaboration  
University administration/staff

## **Appendix N: Final Codes**

Academic Dishonesty

Academic Experiences

Academic Experiences – In Class

Academic Experiences – Out of Class

Academic Integrity

Beliefs and Values

Beliefs and Values – Academic Dishonesty

Beliefs and Values – Collaborative Learning

Beliefs and Values – Education

Beliefs and Values – Institution

Collaborative Learning

Collaborative Learning – Accountability

Collaborative Learning – Assignment

Collaborative Learning – Cooperation

Collaborative Learning – Group

Collaborative Learning – Interdependence

Community

Community – Friends

Community – Classmates

Faculty

Faculty (General)

Faculty – Beliefs about

Faculty – Discussed Academic Integrity

Faculty – Discussed Collaboration

Faculty – Encouraged Collaboration

Teaching Assistant/Academic Staff

Goal Orientation

Goal Orientation – Answer when Asked

Goal Orientation – Mastery

Goal Orientation – Performance

Moral Development

Moral Development – Descriptions of Cheating

Moral Development – Decisions about Cheating

Moral Development – Decisions, Other

Moral Development – Ethics, Decisions about Cheating

Opportunity to Cheat

Opportunity to Cheat – No

Opportunity to Cheat – Yes

Personal

Personal – Background

## Appendix N (continued)

- Personal – Development while in College
- Personal – Family
- Personal – Family Values
- Personal – Goals
- Personal – High School
- Personal – Major Choice
- Personal – Self
- Personal – Self as Student
- Personal – Study Technique
- Personal – Values
- University Experiences
  - University Experiences – Academic
  - University Experiences – Nonacademic
- Reasons for Academic Dishonesty/Integrity
  - Reasons – Goal Orientation – Mastery – Not To Cheat
  - Reasons – Goal Orientation – Mastery – To Cheat
  - Reasons – Goal Orientation – Performance – To Cheat
  - Reasons – Moral Development – Strong Ethics – Not To Cheat
  - Reasons – Moral Development – Weak Ethics – To Cheat
  - Reasons – Other – Not to Cheat
  - Reasons – Other – To Cheat
- Rules
  - Rules – Asked
  - Rules – Discussed with Classmates/Friends
  - Rules – Discussed with Faculty
  - Rules – Discussed with Staff/TAs
  - Rules – Knowledge of
- Stories – Permitted
  - Permitted 04
  - Permitted 05
  - Permitted 06
  - Permitted 07
  - Permitted 08
  - Permitted 09
  - Permitted 11
  - Permitted 12
  - Permitted 14
  - Permitted 16
  - Permitted 17
  - Permitted 18
  - Permitted 19

Appendix N (continued)

Permitted 20

Permitted 23

Permitted 25

Permitted 27

Permitted 28

Permitted 30

Stories – Permitted and Unpermitted

Both 01

Both 02

Both 03

Both 13

Both 15

Stories – Unpermitted

Unpermitted 10

Unpermitted 21

Unpermitted 22

Unpermitted 24

Unpermitted 26

## References

- Anderman, E. M. (2007). The effects of personal, classroom, and school goal structures on academic cheating. In E. M. Anderman & T. B. Murdock (Eds.), *Psychology of academic cheating* (pp. 87-106). Burlington, MA: Elsevier Academic Press.
- Anderman, E. M., Griesinger, T., & Westerfield, G. (1998). Motivation and cheating during early adolescence. *Journal of Educational Psychology*, 90(1), 84-93.
- Anderman, E. M., & Koenka, A. C. (2017). The relation between academic motivation and cheating. *Theory Into Practice*, 56(2), 95-102.
- Anderman, E. M., & Murdock, T. B. (2007). The psychology of academic cheating. In E. M. Anderman & T. B. Murdock (Eds.), *Psychology of academic cheating* (pp. 1-5). Burlington, MA: Elsevier Academic Press.
- Anderman, E. M., & Murdock, T. B. (Eds.). (2007). *Psychology of academic cheating*. Burlington, MA: Elsevier Academic Press.
- Ariely, D., Baker, L., Brown, T., Bryan, S., Danesh, K., Graham, T., . . . Valilis, N. (2012). *Integrity in undergraduate life at Duke University: A report on the 2011 survey*. Retrieved from Durham, NC: Get URL!
- Barrett, R., & Cox, A. L. (2005). "At least they're learning something": The hazy line between collaboration and collusion. *Assessment & Evaluation in Higher Education*, 30(2), 107-122.
- Beasley, E. M. (2014). Students reported for cheating explain what they think would have stopped them. *Ethics & Behavior*, 24(3), 229-252.
- Bell, D. (2007). *University of Georgia academic honesty survey*. Retrieved from Athens, GA:
- Bertram Gallant, T. (2006). *Reconsidering academic dishonesty: A critical examination of a complex organizational problem*. (Doctor of Philosophy), University of San Diego,
- Bertram Gallant, T. (2008). *Academic integrity in the twenty-first century: A teaching and learning imperative*. San Francisco: Jossey-Bass.
- Bing, M. N., Davison, H. K., Vitell, S. J., Ammeter, A. P., Garner, B. L., & Novicevic, M. M. (2012). An experimental investigation of an interactive model of academic cheating among business school students. *Academy of Management*, 11(1), 28-48.

- Blum, S. D. (2009). *My word! Plagiarism and college culture*. Ithaca, NY: Cornell University.
- Bowen, H. R. (1997). *Investment in learning: The individual and social value of American higher education* (2nd ed.). Baltimore, MD: Johns Hopkins University Press.
- Bowers, W. J. (1964). *Student dishonesty and its control in college* (Cooperative Research Project, OE 1672). Retrieved from New York, NY:
- Brimble, M. (2016). Why students cheat: An exploration of the motivators of student academic dishonesty in higher education. In T. Bretag (Ed.), *Handbook of Academic Integrity* (pp. 365-382). Singapore: Springer.
- Brinkman, S. (2013). *Qualitative interviewing: Understanding qualitative research*. New York, NY: Oxford.
- Brown, B. S., & Emmett, D. (2001). Explaining variations in the level of academic dishonesty in studies of college students: Some new evidence. *College Student Journal*, 35(4), 529-538.
- Bushway, A., & Nash, W. R. (1977). School cheating behavior. *Review of Educational Research*, 47(4), 623-632. doi:10.3102/00346543047004623
- Campbell, W. G. (1935). *A comparative investigation of the behavior of students under an honor system and a proctor system in the same university*. Los Angeles, CA: The University of Southern California Press.
- Center for Postsecondary Research. (2017). The Carnegie classification of institutions of higher education.
- Chickering, A. W., & Reisser, L. (1993). *Education and identity* (2nd ed.). San Francisco: Jossey-Bass Publishers.
- Cole, S., & McCabe, D. L. (1996). Issues in academic integrity. *New Directions for Student Services*, 1996(73), 67-77.
- Committee on Intellectual Integrity. (2007). *Academic integrity survey 2006-2007: Summary of results*. Retrieved from Oswego, NY.
- Cooper, H., Robinson, J. C., & Patall, E. A. (2006). Does homework improve academic achievement? A synthesis of research, 1987-2003. *Review of Educational Research*, 76(1), 1-62. doi:10.3102/00346543076001001



- Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory Into Practice*, 39(3), 124-130. doi:10.1207/s15430421tip3903\_2
- Crown, D. F., & Spiller, M. S. (1998). Learning from the literature on collegiate cheating: A review of empirical research. *Journal of Business Ethics*, 17(6), 683-700. doi:10.1023/A:1017903001888
- Davidson, N. (2002). Cooperative and collaborative learning. In J. Thousand, A. Villa, & A. Nevin (Eds.), *Creativity and collaborative learning: The practical guide to empowering students, teachers, and families* (2nd ed., pp. 181-195). Baltimore, MD: Paul H. Brooks.
- Dedoose. (2014). Resources: Qualitative research and mixed methods research.
- Eison, J. A. (1981). A new instrument for assessing students' orientations towards grades and learning. *Psychological Reports*, 48, 919-924.
- Eison, J. A., Pollio, H. R., & Milton, O. (1986). Educational and personal characteristics of four different types of learning- and grade-oriented students. *Contemporary Educational Psychology*, 11, 54-67.
- Evans, N. J., Forney, D. S., Guido, F. M., Patton, L. D., & Renn, K. A. (2010). *Student development in college: Theory, research, and practice* (2nd ed.). San Francisco, CA: Jossey-Bass Publishers.
- Faculty Senate Ad-Hoc Committee on Academic Integrity. (2012). *Final report*. Retrieved from Anchorage, AK.
- Gallant, T. B. (2006). *Reconsidering academic dishonesty: A critical examination of a complex organizational problem*. (Doctor of Philosophy), University of San Diego,
- Gallant, T. B. (2008). *Academic integrity in the twenty-first century: A teaching and learning imperative*. San Francisco: Jossey-Bass.
- Gallant, T. B. (2017). Academic integrity as a teaching & learning issue: From theory to practice. *Theory into Practice*, 56, 88-94.
- Gismondi, A. (2006). The downside of the Internet: Cheating and technology in higher education. *Journal of College & Character*, 7(5), 1-4.

- Glesne, C. (2011). *Becoming qualitative researchers: An introduction* (4th ed.). Boston, MA: Pearson.
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59-82.
- Hinman, L. M. (2002). The impact of the Internet on our moral lives in academia. *Ethics and Information Technology*, 4, 31-35.
- Johnson, D., & Johnson, R. (2009). An educational psychology success story: Social interdependence theory and cooperative learning. *Educational Researcher*, 38(5), 365-379. doi:10.3102/0013189X09339057
- Johnson, D., Johnson, R., & Smith, K. (1998, July/August). Cooperative learning returns to college: What evidence is there that it works? *Change: The Magazine of Higher Learning*, 30, 26-35.
- Johnson, D., Johnson, R., & Smith, K. (2007). The state of collaborative learning in postsecondary and professional settings. *Educational Psychology Review*, 19, 15-29. doi:10.1007/s110648-006-9038-8
- Johnson, R., & Johnson, D. (1994). An overview of cooperative learning. In J. S. Thousand, R. A. Villa, & A. I. Nevin (Eds.), *Creativity and collaborative learning: The practical guide to empowering students, teachers, and families* (1st ed.). Baltimore, MD: Paul T. Brookes.
- Josien, L., & Broderick, B. (2013). Cheating in higher education: The case of multi-methods cheaters. *Academy of Educational Leadership Journal*, 17(3), 93-105.
- Kibler, W. L. (1988). *Academic integrity and student development: Legal issues and policy perspectives*. Asheville, NC: College Administration Publications.
- King, P. M., & Mayhew, M. J. (2002). Moral judgement development in higher education: Insights from the defining issues test. *Journal of Moral Education*, 31(3), 247-270. doi:10.1080/0305724022000008106
- Kohlberg, L. (1976). Moral stages and moralization: The cognitive-developmental approach. In T. Lickona (Ed.), *Moral development and behavior: Theory, research, and social issues* (pp. 31-53). New York, NY: Holt, Rinehart and Winston.
- Kohlberg, L. (1980). Stages of moral development as a basis for moral education. In B. Munsey (Ed.), *Moral development, moral education, and Kohlberg: Basic issues*

- in philosophy, psychology, religion, and education* (pp. 15-98). Birmingham, AL: Religious Education Press.
- Kohlberg, L., & Candee, D. (1984). The relationship of moral judgement to moral action. In W. M. Kurtines & J. L. Gerwitz (Eds.), *Morality, moral behavior, and moral development* (pp. 41-51). New York, NY: John Wiley & Sons.
- Kohlberg, L., Levine, C., & Hewer, A. (1983). *Moral stages: A current fomulation and a response to critics* (Vol. 10). Basel, Switzerland: Karger.
- Kolb, K. H., Longest, K. C., & Singer, A. J. (2015). Choosing not to cheat: A framework to assess students' rationales for abiding by academic integrity policies. *International Journal for the Scholarship of Teaching and Learning*, 9(1-23).
- Lai, E. R. (2011). Collaboration: A literature review.
- Lang, J. M. (2013a, May 28). Cheating lessons, Part 1, Essay. *The Chronicle of Higher Education*.
- Lang, J. M. (2013b, July 8). Cheating lessons, Part 2, Essay. *The Chronicle of Higher Education*.
- Lang, J. M. (2013c). *Cheating lessons: Learning from academic dishonesty*. Cambridge, MA: Harvard University Press.
- Mawdsley, R. D. (1994). *Academic misconduct: Cheating and plagiarism*. Topeka, KS: National Organization on Legal Problems of Education.
- Maxwell, J. A. (2005). *Qualitative research design: An interactive approach* (Vol. 41). Thousand Oaks, CA: Sage.
- McCabe, D. (2016). Cheating and honor: Lessons from a long-term research project. In T. Bretag (Ed.), *Handbook of Academic Integrity* (pp. 187-198). Singapore: Springer.
- McCabe, D. L. (2005a). Cheating among college and university students: A North American perspective. *International Journal for Educational Integrity*, 1(1).
- McCabe, D. L. (2005b). It takes a village: Academic dishonesty and educational opportunity. *Liberal Education*, 26-31.
- McCabe, D. L. (2016). Cheating and honor: Lessons from a long-term research project. In T. Bretag (Ed.), *Handbook of Academic Integrity* (pp. 187-198). Singapore: Springer.

- McCabe, D. L., Butterfield, K. D., & Treviño, L. K. (2012). *Cheating in college: Why students do it and what educators can do about it*. Baltimore, MD: Johns Hopkins University Press.
- McCabe, D. L., & Pavela, G. (2000). Some good news about academic integrity. *Change: The Magazine of Higher Learning*, 32(5), 32-38.  
doi:10.1080/00091380009605738
- McCabe, D. L., & Treviño, L. K. (1993). Academic dishonesty: Honor codes and other contextual influences. *Journal of Higher Education*, 64(5).
- McCabe, D. L., & Treviño, L. K. (1996, Jan/Feb). What we know about cheating in college: Longitudinal trends and recent developments. *Change: The Magazine of Higher Learning*, 28, 28-33.
- McCabe, D. L., & Treviño, L. K. (1997). Individual and contextual influences on academic dishonesty. *Research in Higher Education*, 38(3), 379-396.
- McCabe, D. L., Treviño, L. K., & Butterfield, K. D. (2001). Cheating in academic institutions: A decade of research. *Ethics & Behavior*, 11(3), 219-232.
- McGowan, S. (2016). Breaches of academic integrity using collusion. In T. Bretag (Ed.), *Handbook of Academic Integrity*. Singapore: Springer.
- McNabb, L., & Olmstead, A. (2009). Communities of integrity in online courses: Faculty member beliefs and strategies. *Journal of Online Learning and Teaching*, 5(2), 208-221.
- Miles, M. B., & Huberman, M. A. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage.
- Minor, J. B. (1930). The control of cheating in college. *School and society*, 32, 199-201.
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.
- Moustakas, C. (2015). Heuristic research: Design and methodology. In K. J. Schnieder, F. Pierson, & J. F. T. Bugental (Eds.), *The handbook of humanistic psychology: Theory, research, and practice* (2nd ed., pp. 309-320). Thousand Oaks, CA: Sage.
- Murdock, T. B., & Anderman, E. M. (2006). Motivational perspectives on student cheating: Toward an integrated model of academic dishonesty. *Educational Psychologist*, 41(3), 129-145. doi:10.1207/s15326985ep4103\_1

- Nelson, M. F., James, M. S. L., Miles, A., Morrell, D., & Sledge, S. (2017). Academic integrity of millennials: The impact of religion and spirituality. *Ethics & Behavior*, 25(5), 385-400. doi:10.1080/10508422.2016.1158653
- Nuss, E. M. (1988). Academic dishonesty: A contemporary problem in higher education. In W. L. Kibler, E. M. Nuss, B. G. Paterson, & G. Pavela (Eds.), *Academic integrity and student development: Legal issues and policy perspectives* (pp. 1-6). Asheville, NC: College Administration Publications.
- O'Donnell, A., & Hmelo-Silver, C. (2013). What is collaborative learning? An overview. In C. E. Hmelo-Silver, C. Chinn, C. K. K. Chan, & A. O'Donnell (Eds.), *The international handbook of collaborative learning* (pp. 1-16). New York: Taylor & Francis.
- O'Rourke, J., Barnes, J., Deaton, A., Fulks, K., Ryan, K., & Rettinger, D. A. (2010). Imitation is the sincerest form of cheating: The influence of direct knowledge and attitudes on academic dishonesty. *Ethics & Behavior*, 20(1), 47-64. doi:10.1080/10508420903482616
- Office of Academic Integrity. (2009). *Selected undergraduate student survey results: 2009 survey of academic integrity*.
- Panitz, T. (n.d.). The case for student centered instruction via collaborative learning paradigms.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research* (2nd ed.). San Francisco: Jossey-Bass.
- Pickus, N., & Shanahan, S. (2012, September 27). I say 'cheating,' you say 'collaborating', Opinion. *The Chronicle of Higher Education*.
- Poland, B. D. (2001). Transcription quality. In J. F. Gubrium & J. A. Holstein (Eds.), *Handbook of interview research: context and method* (pp. 629-649). Thousand Oaks, CA: Sage.
- Power, F. C. (2003). Kohlberg, Lawrence (1927-1987). In J. W. Gunthrie (Ed.), *Encyclopedia of Education* (2nd ed., Vol. 4, pp. 1376-1378). New York, NY: Macmillan Reference.
- Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education*, 93(3), 223-231.
- Qualtrics. (2014). Qualtrics Research Suite.

- Rest, J., Power, C., & Brabeck, M. (1988). Lawrence Kohlberg (1927-1987). *American Psychologist*, 43(5), 399-400. doi:10.1037/h0091958
- Resta, P., & Laferrière, T. (2007). Technology in support of collaborative learning. *Educational Psychology Review*, 19, 65-83. doi:10.1007/s10648-007-9042-7
- Resta, P., & Lee, H. (2010). Peer and self-assessment. In R. Ubell (Ed.), *Virtual teamwork: Mastering the art and practice of online learning and corporate collaboration* (pp. 45-64). Hoboken, NJ: Wiley.
- Rettinger, D. A., & Jordan, A. E. (2005). The relations among religion, motivation, and college cheating: A natural experiment. *Ethics & Behavior*, 15(2), 107-129.
- Ritchie, J., & Lewis, J. (Eds.). (2010). *Qualitative research practice: A guide for social science students and researchers*. London, UK: Sage.
- Roberts, C. M. (2010). *Dissertation journey: A practical and comprehensive guide to planning, writing, and defending your dissertation* (2nd ed.). Thousand Oaks, CA: Corwin.
- Rogat, T. K., Linnenbrink-Garcia, L., & DiDonato, N. (2013). Motivation in collaborative groups. In C. E. Hmelo-Silver, C. A. Chinn, C. K. K. Chan, & A. O'Donnell (Eds.), *The International Handbook of Collaborative Learning* (pp. 250-267). New York: Taylor & Francis.
- Saldaña, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). London, UK: Sage.
- Schunk, D. H. (2012). *Learning theories: An educational perspective* (6th ed.). Boston, MA: Pearson.
- Scrimshire, A. J., Stone, T. H., Kisamore, J. L., & Jawahar, I. M. (2017). Do birds of a feather cheat together? How personality and relationships affect students cheating. *Journal of Academic Ethics*, 1-21.
- Seidman, I. (2013). *Interviewing as qualitative research: A guide for researchers in education and the social sciences* (4th ed.). New York, NY: Teachers College.
- Smith, B. L., & MacGregor, J. T. (1992). What is collaborative learning? In A. Goodsell, M. Maher, V. Tinto, B. L. Smith, & J. MacGregor (Eds.), *Collaborative learning: A sourcebook for higher education* (pp. 9-22). University Park, PA: National Center on Postsecondary Teaching, Learning, and Assessment at Pennsylvania State University.

- Spear, J. A., & Miller, A. N. (2012). The effects of instructor fear appeals and moral appeals on cheating-related attitudes and behavior of university students. *Ethics & Behavior*, 22(3), 196-207.
- Stahl, G. (2006). *Computer support for building collaborative knowledge*. In Acting with Technology.
- Strang, R. (1937). *Behavior and background of students in college and secondary school*. New York, NY: Harper and Brothers.
- Sutton, A., & Taylor, D. (2011). Confusion about collusion: Working together and academic integrity. *Assessment and Evaluation in Higher Education*, 36(7), 831-841.
- The New York Times. (1915, June 20). College honor system a success: United States Bureau of Education so finds in canvass of the country's leading universities--Views of educators. *The New York Times*.
- The Texas Tech University Ethics Center. (2010). *Arbor Day 2010: Academic Integrity Survey Report*.
- The Texas Tech University Ethics Center. (2011). *Texas Tech University Arbor Day academic integrity survey*.
- The Texas Tech University Ethics Center. (2012). *Texas Tech University Arbor Day academic integrity survey report, June 2012*.
- The Texas Tech University Ethics Center. (2013). *Texas Tech University Arbor Day academic integrity survey report, June 2013*.
- The Texas Tech University Ethics Center. (2014). *Texas Tech University Arbor Day academic integrity survey report, June 2014*.
- UMBC Office of Institutional Research. (2012). *UMBC 2011 academic integrity survey. sensitive pedagogy*. Albany, NY: State University of New York.
- van Manen, M. (2014). *Phenomenology of practice: Meaning-giving methods in phenomenological research and writing*. Walnut Creek, California: Left Coast Press.
- Vandehey, M., Diekhoff, G., & LaBeff, E. (2007). College cheating: A twenty-year follow-up and the addition of an honor code. *Journal of College Student Development*, 48(4), 468-480. doi:10.1353/csd.2007.0043

- Whitley, B. E. (1998). Factors associated with cheating among college students: A review. *Research in Higher Education*, 39(3), 235-274.
- Whitley, B. E., & Keith-Spiegel, P. (2002). *Academic dishonesty: An educator's guide*. Mahwah, NJ: L. Erlbaum Associates.
- Willis, J. W. (2007). *Foundations of qualitative research: Interpretive and critical approaches*. Thousand Oaks, CA: Sage.
- Wilson, W. (1905, August 12). The honor system in school and college, Opinion. *The New York Times*.
- Wrightsman, L. S. (1959). Cheating: A research area in need of resuscitation. *Peabody Journal of Education*, 37(3), 145-149.
- Yardley, J., Rodriguez, M. D., Bates, S. C., & Nelson, J. (2009). True confessions?: Alumni's retrospective reports on undergraduate cheating behaviors. *Ethics & Behavior*, 19(1), 1-14.
- Young, R. L., Miller, G. N. S., & Barnhardt, C. L. (2017). From policies to principles: The effects of campus climate on academic integrity, a mixed methods study. *Journal of Academic Ethics*, 16(1), 1-17.
- Yu, H., Glanzer, P. L., & Johnson, B. (2017). Why students cheat: A conceptual framework of personal, contextual, and situational factors. In D. M. Velliaris (Ed.), *Handbook on research on academic misconduct in higher education* (pp. 35-59): Information Science Reference.
- Yu, H., Glanzer, P. L., Sriram, R., Johnson, B., & Moore, B. (2017). What contributes to college students' cheating? A study of individual factors. *Ethics & Behavior*, 27(5), 401-422. doi:10.1080/10508422.2016.1169535