HOW GENERALISTS FUNCTION AS A COMMUNITY OF PRACTICE IN A
COMMUNITY COLLEGE ONE-STOP STUDENT SERVICE CENTER

BY

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DISSERTATION

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Conley (2008) suggests that, in order for students to matriculate and function as successful learners, they need to develop college knowledge, referring to understanding college admission, financial aid, college culture, and the college system. One approach that community colleges are implementing to support their students through the transition into their institution is the one-stop student services center (American Association of Collegiate Registrars and Admissions Officers, 2007; King & Fox, 2007; Wells, 2009). One-stop student services centers staffed a single front desk by student service personnel who act as generalists. These professionals help students gain a richer and deeper understanding of what they need to know and do to be successful (Beede, 1999; Day & Pitts, 2002; Javaheripour, 2009; Shugart & Romano, 2008; Walters, 2003). However little is known about how these student affairs professionals develop shared knowledge necessary to support the development of students' college knowledge.

This study uses the concept of a community of practice (Lave & Wenger, 1991; Wenger, 1998; Wenger, McDermott, & Snyder, 2002) to examine how community college generalists engage in social learning to promote college knowledge that helps community college students succeed. To obtain a deep and nuanced understanding, a qualitative case study was conducted at Midwest Community College. Data was collected through interviews with generalists and supervisors, observation of the generalists, and analysis of the one-stop student services written and electronic documents.

Findings that emerged from this study demonstrate that generalists are experts in enrollment processes that support admission, financial aid, registration, and payment processes. They use their breadth of knowledge to support prospective students whereas their depth of
knowledge supports students who encounter enrollment challenges. The generalists are also highly attuned to students' emotions as they use their emotional intelligence to offer guidance and validate students' efforts. Shared knowledge of enrollment processes is built through attendance at weekly cross-training programs and the generalists' daily interactions with other student service colleagues. In their practices with students, generalists seek to build students' self-sufficiency with enrollment processes by using a simplified process, providing precise and comprehensive information, offering encouragement, and assisting with internet applications. A narrow segment of college knowledge related to technology, financial literacy, and time management emerged as the topics generalists frequently help students build.
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CHAPTER 1

RESEARCH PROBLEM

College student populations are growing and diversifying (Aud, Fox, & KewalRamani, 2010), including increasing numbers of first-generation college and other underserved students who lack the parental and family experience with college that is known to affect college success (Chen, 2005; Choy, 2001; Ishitani, 2006). To complete college, all students need to understand how to navigate the complex college experience. Conley (2008) suggests that, in order for students to matriculate and function as successful learners, they need to develop college knowledge, referring to understanding college admission, financial aid, culture, and system.

Compared to students who enroll in 4-year colleges and universities, students who attend community colleges tend to be less well prepared for the college experience (NCES, 2012). They are also older than the traditional college-age student and more are female, minority, low-income, and financially independent than their 4-year college student counterparts (Horn & Nevill, 2006). Community colleges also enroll more first-generation college students than 4-year institutions (Chen, 2005). Given the importance of college success for all students, it is important to understand what community colleges are doing to support their diverse student bodies. It is vital to understand how these schools are delivering services and supports that enable students to be successful. One approach that colleges are implementing to support their students is the one-stop student services center.

More prevalent in community colleges than 4-year institutions (American Association of Collegiate Registrars and Admissions Officers, 2007), the one-stop
student services center model is used to help students achieve and persist (King & Fox, 2007; Wells, 2009). King and Fox, as well as Wells, argue that one-stop student services centers offer community colleges a way to support their diverse student populations to transition into an institution, to move on to a career, and to continue on to a 4-year institution through transfer.

One-stop student services centers in community colleges cluster student affairs offices within close proximity to one another to give students a single front desk that is staffed by student service personnel. Acting as generalists, professionals who work in these centers attempt to help community college students gain a richer and deeper understanding of how community colleges work and what they need to know and do to be successful (Beede, 1999; Day & Pitts, 2002; Javaheripour, 2009; Shugart & Romano, 2008; Walters, 2003). According to Beede, the one-stop student services center creates a seamless experience for students who seek to obtain information or conduct college business related to admission, academic advising, financial aid, registration, tuition payment, and the like.

Although their duties undoubtedly vary, professionals who act as generalists in one-stop student services centers help students to gain college knowledge and make connections to college resources that Conley (2010) and many others (Bragg, Baber, & Castro, 2011; CCSSE, 2008; Deil-Amen & Rosenbaum, 2003; Karp, 2011; Rosenbaum, Deil-Amen, & Person, 2006; Scott-Clayton, 2011; Venezia & Kirst, 2005; Wathington et al., 2011; Wirth & Padilla, 2008) claim are necessary for student success. To increase student affairs professionals' knowledge, some one-stop student services centers provide cross-training pertaining to the processes and knowledge students need to enroll and
navigate at college, which can be seen as a form of social learning (Anderson & Elliott, 1999; Day & Pitts, 2002; Green, Jefferis, & Kleinman, 2002; Kleinman, 1999; Lewis, 1999; Lonabocker & Wager, 2007; Van Voorhis & Falkner, 2002). Social learning, according to Wenger (1998), contributes to the formation of a community of practice since members engage with others in activities to share ideas and perspectives, including explicit and tacit knowledge. Explicit knowledge is developed through written and verbal communication, and tacit knowledge is gained through observation and modeling (Polanyi, 1966). Whereas the environment of a one-stop student services center would seem to be conducive to social learning, little is known about how professionals who act as generalists develop shared knowledge to function as a community of practice.

This study uses the concept of a community of practice (Lave & Wenger, 1991; Wenger, 1998; Wenger, McDermott, & Snyder, 2002) to examine how community college generalists engage in social learning to promote college knowledge that helps students to succeed. Wenger (1998) defines a community of practice as a group of people who have shared interests, and who also participate in activities that contribute to practice and create a personal identity with the community. Three components undergird the notion of a community of practice: “a domain of knowledge, which defines a set of issues; a community of people who care about the domain; and the shared practice that they are developing to be effective in their domain” (Wenger et al., 2002, p. 27).

This study examines the idea of a community of practice as conceived by Wenger (1998) and Wenger et al. (2002) to understand working relationships among generalist student affairs professionals who share college knowledge with students in the context of a one-stop student services center situated at a community college. Conducting this study
at a community college one-stop student services center bounds this study and afforded me the opportunity to consider the ways the community college context shapes and influences the individual and collective understandings and behaviors of generalists who are part of the larger organizational culture.

**Purpose of the Study**

The purpose of this qualitative case study was to examine how generalists in a community college one-stop student services center shared knowledge to support students’ development of college knowledge. Thus, this study examined how generalists, acting as a community of practice, engaged in social learning to build and convey to students their shared knowledge about college knowledge. In this study, social learning took into account cross-training and other learning activities, such as staff meetings, professional development opportunities, and daily office interactions. The study also considered the multi-faceted information that generalists learned about and shared with one another to convey college knowledge that students need to navigate their collegiate experience. This study also sought to understand the tacit and explicit knowledge (Polkinghorne, 1991) that generalists share within their community of practice and convey to students to develop their college knowledge.

This study addressed the need to obtain a deep and nuanced understanding of how generalists, acting together as a community of practice, convey college knowledge to the diverse learners they serve to support in the context of the community college. Rich, thick description conveyed how a community of practice made up of student affairs professionals who worked on the ground and illustrated how they carried out their work at the heart of a one-stop student services operation. Ultimately, this case study produced
an in-depth description of how generalist practitioners worked together to address the needs of their students.

**Research Questions**

The grand tour research question for this study is: How do generalists, as a community of practice, build and convey shared knowledge to develop students’ college knowledge in a community college one-stop student service context? Three sub-questions guide the data collection for this study:

1. What domains of knowledge do generalists who operate as a community of practice share with one another?
2. How do generalists who operate as a community of practice learn together through cross-training and other social learning activities?
3. How do generalists who operate as a community of practice contribute to developing students’ college knowledge?

**Methods**

This qualitative study focused on a single case that allows for an in-depth examination of several complex dimensions of a phenomenon (Stake, 1995). Drawing upon a framework promoted by Wenger (1988), this study sought to understand three common components of a community of practice: a) the domain or expertise within the generalists' community of practice, b) the generalists' social learning activities that build shared knowledge and c) the generalists' application of shared knowledge towards supporting the development of students' college knowledge. The primary data collection methods were observation, interview, and document analysis to create the immersion experience that Stake (1995) claims is necessary for a researcher to understand the
ordinary and the unique context associated with a case. A detailed description of the methods used in this study is presented in Chapter 3.

**Significance of the Study**

Community colleges are considered gateways into higher education (Dougherty, 1994); however, providing access is no longer sufficient when college completion has become a national objective (AACC, 2010; College Board, 2009; Lumina Foundation 2010; Obama, 2009). This study provides the opportunity to consider how community college student affairs practitioners operating as a community of practice develop shared knowledge and apply their shared understandings to support the development of students' college knowledge. Results of this study will increase understanding of community college practices that provide students with integrated financial, social and academic support, all practices that the Center for the Study of Community College Student Engagement (2008) claims supports success among new community college students. These results are thought to be useful to chief student affairs administrators who struggle to gain support for institutional resources from stakeholders within their schools to deliver student services and student affairs professionals who seek to help community college students understand how to enroll in college and navigate college processes and systems.

**Definition of Terms**

College knowledge: Contextual skills and awareness is defined as understanding college processes associated with gaining admission to and navigating within college (Conley, 2007, 2008, 2010, 2012).
Communities of practice: A group of people with a shared interest, participating in activities that deepen their knowledge and contribute towards practice (Wenger, 1998).

Explicit knowledge: Information that can be explained verbally or in writing.

One-stop student services center: Multiple student service departments delivering service in a single location through an integrate approach.

Tacit knowledge: Information one is not necessarily aware of and is not easily communicated.
CHAPTER 2

REVIEW OF LITERATURE

The literature included in this chapter provides an understanding of a community of practice, one-stop student services centers, and college knowledge. The first section of this chapter explains the community of practice framework and includes community college and student affairs studies to provide an understanding of how the community of practice concept has been used in these contexts. The second section uses institutional essays and dissertations to explain the one-stop student service model, including the generalists' domain of knowledge and their social learning experiences and assessment processes to understand the outcomes that they value. The final section pertaining to college knowledge offers empirical studies to reveal the barriers that some students face enrolling and navigating through college processes.

A comprehensive library search was conducted to identify relevant articles and dissertations using the following databases: ABI/INFORM Complete, Academic OneFile, Academic Search Complete, Academic Search Premier, Business Source Complete, Dissertation Abstracts, Education Full Text, ERIC, PsycINFO, SOCIndex with full text and Sociological Abstracts. Keywords were: college knowledge, college know how, community college, community of practice, communities of practice, customer service, higher education, one-stop, student affairs, student service, enrollment services, customer service, and community college. I gathered materials recommended by faculty and other practitioners familiar with the topic.
Community of Practice as Conceptual Framework

According to Wenger (1998), a community of practice is a group of people with a shared interest, participating in social learning activities to develop knowledge that will contribute towards practice. The concept of a community of practice as described by Lave and Wenger (1991), Wenger (1998), and Wenger, McDermott, and Snyder (2002) considers how learning takes place through social participation. There three essential components of a community of practice are “a domain of knowledge, which defines a set of issues; a community of people who care about the domain; and the shared practice that they are developing to be effective in their domain” (Wenger, McDermott, and Snyder, 2002; p. 27). The following sections review the origins of the conceptual framework; provide definitions and descriptions of the essential components; and discuss student affairs, student services, and community college studies that have utilized the community of practice concept.

Studies on Community of Practice

In their five studies of apprenticeships, Lave and Wenger (1991) provide an understanding of the processes that organizations use to transition a newcomer to legitimate group member. Midwives in Mexico, tailors in Liberia, quartermasters in the U.S. Navy, butchers in U.S. supermarkets, and non-drinking alcoholics in Alcoholics Anonymous provided the basis for understanding the interdependencies in learning. The results of these studies indicate an apprentice will build a relationship with the master tradesman and connections with other group members who are on the path to becoming a master tradesman. Likewise, newcomers to other organizations develop affiliations with the leader and other organizational members. These diverse relationships provide the
apprentice or newcomer access to participate in legitimate peripheral activities, seen as low risk tasks, to build expertise and understanding of norms. The results of these studies suggest that individuals learn through a social process, in a broad world context, which Lave and Wenger refer to as community of practice.

Wenger's (1998) definition of a community of practice emphasizes groups' mutual engagement toward a shared enterprise and members' identities within the group. Shared enterprises are defined as the group's interests, whether the interests are based on pleasure or survival. Mutual engagement is the process of individuals interacting and learning together. When there is mutual engagement towards a shared enterprise, the community builds social relationships and collective learning. The wisdom generated through mutual engagement is defined as shared repertoire.

Wenger's (1998) learning assumptions are based on four premises: (a) people are social, (b) knowledge is demonstrated competency that has value to a group or society, (c) active engagement is necessary to gain knowledge, and (d) learning allows the individual to participate in meaningful activities. Wenger argues that learning provides: (a) individuals a means to contribute towards their communities of practice, (b) communities of practice a means to refine practice and orient newcomers, and (c) organizations a means to sustain knowledge and become more effective.

Wenger, McDermott, and Snyder (2002) argue organizations need to develop communities of practice to manage knowledge. A community of practice is defined as "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (p. 4). According to Cox (2005), this definition of community of practice does not
emphasize practice or accomplishing work as heavily as Wenger (1998). However, Wenger, McDermott, and Snyder’s definition is provided within the context of a text encouraging practitioners to develop communities of practice in the workplace since communities of practice can build knowledge necessary to compete in a global marketplace.

Components of a Community of Practice Framework

Wenger (1998) and Wenger, McDermott, and Snyder (2002) identify three components in a community of practice. These elements are: domain of knowledge, community, and practice. These elements are further defined and explained below.

Domain of Knowledge

The domain is a defined set of issues valued by a group of people (Wenger, McDermott, & Snyder, 2002). Membership in a community of practice indicates the members have a form of competence (Wenger, 1998). Members face common problems created by internal conditions and external mandates (Wenger), and they determine what issues, understandings and open questions are important to discuss (Wenger, McDermott, & Snyder, 2002). There is universal concern in the community of practice to develop additional competency and expertise in the domain in order to affect practice. Also, when the members’ domain of knowledge strongly connects with an organization’s goals the community of practice is more likely to succeed (Wenger, McDermott, & Snyder, 2002).

Community

Relationships, personal interaction, and mutual commitment support the learning that is essential to a community of practice (Wenger, McDermott, & Snyder, 2002).
Through regular social learning activities, the community of practice identifies what is known and what is not known within a domain of knowledge. In addition, regular social learning activities create an environment that encourages members to share, offer and receive support, develop trust and respect and build relationships (Wenger, 1998).

When engagement includes observation of practice, members of the community go beyond sharing of explicit knowledge (Duguid, 2005). Through observation, members gain access to tacit knowledge and appreciate how practice is delivered ethically and under unique circumstances. According to Duguid, tacit knowledge allows members to consider what members say alongside with what members do. Tacit knowledge helps to build cognitive and technical knowledge (Nonaka & Takeuchi, 1995). Beliefs, ideas, paradigms, values, intuition, and mental models are types of cognitive knowledge, with the technical dimension including know-how, crafts, and informal skills.

Membership in a community of practice is voluntary (Wenger, McDermott, & Snyder, 2002). When an individual is assigned to a group by a supervisor in the workplace, the individual must make a personal investment by willingly participating in the success of the group in order to be considered a community member. The greater the investment, the more likely the individual will be a member of the core group and actively participate. Less interested individuals will become an active member and attend activities regularly, but not be a member of the core group, or become peripheral members who rarely participate.
Practice

The term practice indicates the individuals are doing something (Wenger, 1998) and their collective knowledge, explicit and tacit, is created and stored in order to do or make something (Wenger, McDermott, & Snyder, 2002). Shared knowledge is saved in stories, rules, theories, principles, tools, language, and documents or other repositories and reflects history and understandings (Wenger, 1998). When learning occurs in a work setting, it can lead to innovation. By building explicit and tacit knowledge, the community ensures knowledge is retained (Brown & Duguid, 2001).

The next section discusses student affairs in higher education, including the community college, to provide a context for understanding how the community of practice framework may apply to one-stop student services centers.

Communities of Practice in Higher Education

This literature review reports on communities of practice studies in higher education including community colleges, administrators, faculty and staff. The literature review focuses on student service professionals who personally interact with one another and with students, and omits studies of students who are part of learning communities or virtual communities of practice that are considered only tangentially relevant to this work. The research on student affairs and communities of practice in the higher education context is reviewed first, then research concerning community college faculty is presented. This section concludes with studies about college administrators and staff.

Student Affairs and Communities of Practice

Two studies conducted at public institutions examined groups through the framework of a community of practice. Lewis (2002) used the framework to consider
community and social learning, and Smith (2002) employed a community of practice framework to examine student affairs. Further, Blimling (2001), in an examination of student affairs literature, identified four communities of practice in student affairs built on unique assumptions about student affairs objectives.

At a large public Midwestern University, Lewis (2000) studied how academic advisers learn to advise students. Conducted at a land-grant institution, the study used observation, documents and 21 interviews with academic advisers, assistant deans or directors of student affairs from nine undergraduate colleges to determine whether or not academic advisors exhibited the conditions of a learning community of practice pertaining to university-wide advising. Lewis found academic advisors did not meet the necessary conditions to be considered a university-wide advising community of practice. This conclusion was reached because the advisors primarily received training on how to advise students through individual reading, mentoring or apprenticing within an academic department rather than from other academic advisors throughout the university. Social interaction occurred through contact with a supervisor, other experienced advisors, and students. An electronic list-serve was primarily used to post resource information rather than ask questions and encourage dialogue with other academic advisors.

Lewis concluded that social interaction in the context of practice is necessary for the acquisition of knowledge and skills in a community of practice. Furthermore, Lewis observed that new advisors identify with their departments or smaller units after the initial training period rather than with other academic advisors at the university. Recommendations by Lewis included examining how a community of practice can improve the quality of academic advising. Ultimately, Lewis determined that the
commonality of the academic advisers' duties and responsibilities were less influential in building advising knowledge than the proximity that each advisor had to other employees within his or her academic department.

Smith (2002) analyzed the work of a student affairs division at a large public university in the Blue Ridge Mountains to understand how professionals include student learning in their work. Student learning has been a focus of the American College Personnel Association and the National Association of Student Personnel Administrators since the mid-1990's when these organizations connected the student affairs profession to higher education's central mission of teaching and learning. Smith conducted an embedded case study, using one division as the largest unit and each student affairs office as sub-units. Thirty-six student affairs members participated in interviews or focus groups, with 29 student leaders participating in the focus groups. Also, three faculty members and the university president were interviewed, and observation and documents provided additional data.

Smith (2002) found three communities of practice operating within the division of student affairs rather than a single community of practice. Tensions around customer service and the staff members' knowledge of and use of theory produced communities of practice in areas of student learning, student services, and consumerism (Smith, 2002; Smith & Rodgers, 2005). Understanding how other institutions and student affairs units implement a student learning approach and comparing staff members' to students' perspectives of their practice within the context of student learning was recommended for future research.
The finding that multiple communities of practice exist within a student affairs division (Smith, 2002; Smith & Rodgers, 2005) aligned closely with research conducted by Blimling (2001). Using student affairs literature, Blimling argued that there are four unique perspectives in student affairs, and student affairs professionals must understand these communities of practice, which are: student administration, student service, student development and student learning. These communities are derived from management or educational philosophies and assumptions. The student administration community originates from leadership and organizational theories, legal issues, and the Student Personnel Point of View written by American Council on Education in 1937 (ACPA, 1937) and updated in 1949 (ACPA, 1949). Administration of resources is valued by the student administration community whereas the student service community endorses high-quality and cost-efficient student services that create student satisfaction. This latter community is influenced by the student consumerism movement in the 1980s and business reform efforts in the 1980s and 1990s. The third community, student development, builds on the humanistic movement in psychology and believes student affairs practitioners assist in students' cognitive and psychosocial development. This belief is grounded in the monograph *Student Development in Tomorrow's Higher Education: A Return to the Academy* (Brown, 1972). *The Student Learning Imperative* (ACPA, 1994) is another historical text that influenced the student learning community that incorporated student development concepts advocating for active learning activities that result in the development of skills and knowledge. According to Blimling, student affairs professionals have a preference for one of the communities of practice, but recognize assumptions that exist within each community. Additionally, when a
community of practice is able to find agreement between new information and fundamental assumptions, the student affairs organizations are more likely to support organizational change.

**Communities of Practice in the Community College**

Community college studies that use the community of practice framework identify how faculty members attempt to engage each other and their students to build new instructional techniques. These studies also shed light on the value of the framework to understanding how community colleges can support communities of practice and professional development activities.

Looking first at faculty studies, an action research study by Steele (2011) investigated faculty seeking to support students in health sciences programs by increasing their understanding of overlapping concepts in introductory science courses. Interviews, observations of meetings and classroom activities, and an instructor questionnaire provided the data for this study. Results indicate that the four chemistry and three biology faculty members, acting as a community of practice, improved student learning by agreeing on terms and instructional materials. However, the study did not generate ideas about developing or managing a community of practice beyond the research context.

Barra (2005) also considered how faculty at a community college located in the west utilized faculty learning communities to improve student learning. Using a cross-case analysis of two teaching teams (two teachers per team), individual and team interviews, classroom video, focus groups, and observation provided the qualitative data for this study. Results indicate that faculty who participate in a learning community that
offers meaningful engagement activities become supportive of changes related to improving student learning. Barra recommends future research activities pertaining to the creation of an institutional culture that sustains learning communities and supports development of collective knowledge rather than individual knowledge.

Institutional culture is considered important by Gordin (2006) who uses a case study design to examine community college faculty and researchers conducting student learning outcomes assessment in developmental courses at Sunshine State Community College in Florida. Research methods included individual interviews, a focus group, observation, and document analysis. Results demonstrate an organizational structure, leadership, and resources can strengthen a community of practice.

Similarly, Sam (2002) examined institutional actions that foster or hamper the development of faculty learning at Midwest Community College. Using interviews, observation, and document analysis, results indicate faculty members consistently report discussing teaching ideas beyond the lecture format with other faculty in spite of few formal college processes that foster faculty learning communities. The institution only formally supported faculty innovation through a cross-discipline steering committee charged with improving teaching methods. The results of this study emphasize the voluntary nature of a community of practice and active administrator encouragement including professional development funding. Sam considers the idea of a knowledge community more appropriate than a community of practice for practitioners seeking to create learning communities such as Midwest's cross-discipline steering committee.

Turning to communities of practice involving administration and staff, an action research project by Koan (2011) developed a group of information technology
professionals from a multi-campus community college into a community of practice. The group representing personnel from a 10-campus system consisted of a 6-person leadership team and a support team. Koan investigated the extent the group developed into a community of practice by examining factors that support group development and the value of membership in the group. The methods included web analytics (electronic files and communication); observations of organizational meetings and community of practice meetings; post-community of practice meeting questionnaires; interviews; and an online survey. Results indicated the group began to coalesce due to the leadership provided by the community coordinator and technology steward. Participants rated the meetings as providing good to excellent value, and reported the information shared as useful and supportive. Koan's study indicates that leadership and social learning activities valuable to the members help to build a community of practice.

How support staff contributed to institutional goals was the focus of a study conducted by White (2004) at Los Rios Community College in California. This case study indicated that staff members support transitions and change by being optimistic, demonstrating flexibility, and trusting their strengths and abilities. Strong interpersonal skills, conflict resolution skills, and job knowledge assist support staff with change. However, lack of time prevented support staff from developing shared learning, meaning, and identity as a community in support of institutional improvement. Results of this study indicate institutional resources that support the professional development of support staff nurture the staff members' community and support for new activities related to institutional mission. White recommends future research related to leadership and conflict management, hypothesizing that institutional culture and resources are essential
to validating the importance of support staff and building a community supportive of 
change.

Wiessner and Sullivan (2007) examined learning in a professional development 
program for community college administrators who aspired to the community college 
presidency. Qualitative methods were employed to examine learning activities, reflection 
and knowledge related to theory building, discipline-based research, and training and 
professional development. Results of the study indicate learning activities result in 
building personal, professional and discipline specific knowledge similarly to how 
graduate schools prepare their students for professions. Similar to a community of 
practice, this study engaged professionals with a common interest, provided learning 
activities and built knowledge.

**Community of Practice Summary**

The three elements of a community of practice intertwine like thread woven 
together to form fabric. Each element is needed to create the whole. In a community of 
practice, the domain of knowledge generates interest for the community's social learning 
activities. The community's social learning activities generate common approaches, 
shared understandings, and solutions to problems that the community may apply to their 
practice. When individuals unite as a community of practice, they create the social 
energy that allows groups to respond to new situations (Wenger, 1998). In the work 
place, this can lead to innovation (Brown & Duguid, 1991). However, Wenger also states 
that communities of practice are not to be idealized since the community may not always 
be in agreement or produce new knowledge. The community of practice may have too 
many or too few members, lack trust among its members, or maintain a bias towards
particular ideas (Roberts, 2006). Additionally, members with more power may wield more influence in the development of collective understandings.

The student affairs studies that utilized the community of practice framework indicated that student affairs professionals may belong to a community based on proximity with a specific department, or knowledge and beliefs about student affairs. Lewis's (2000) study of academic advisers at a large public institution revealed how proximity within an academic department, rather than common duties and responsibilities, provided new academic advisers instruction and social learning opportunities. Also, student affairs members' knowledge and beliefs about customers and customer service impacted whether the division incorporated student learning into its work (Smith, 2002; Smith & Rodgers, 2005). Smith's research aligned with findings by Blimling (2001) who identified four communities of practice within student affairs: student learning, student service, student development and student administration. Blimling considered it important for student affairs professionals to recognize and appreciate each of these communities.

Faculty community of practices provided a means to improve student learning, especially when institutions provided the resources necessary for the community of practice to flourish. According to Barra (2005) and Steele (2011), a community of practice provided a framework for community college faculty to engage with each other across departments and disciplines to improve student learning. To strengthen communities of practice interested in improving student learning, community colleges needed to emphasize the voluntary nature of participation and build a supportive culture.
by providing funding (Sam, 2002) and organizational structure and leadership (Gordin, 2006).

The studies pertaining to college administrators and staff indicated leadership and resources may help a community of practice to grow. Leadership that offered social learning activities valued by its members was more likely to produce shared understandings than one that did not (Koan, 2011). Resources for professional development were essential for the development of a community of practice (White, 2004).

The community of practice concept creates a framework to study a group's knowledge and interests, social learning experiences and contributions towards practice (Wenger, 1998; Wenger, McDermott, & Snyder, 2002). According to student affairs and community college studies, there are communities of practice within higher education institutions; however their success varies, in part based on the resources dedicated to the community of practice. The literature indicates leadership and resources for professional development can create the culture necessary to build a community of practice.

Community college faculty may use the community of practice framework as a model to engage in conversations about student learning. Whereas the community of practice framework has not been used in a study pertaining to student affairs professionals at a community college, Blimling (2001) suggests more than one community of practice may exist. These differing communities may lead to disagreement about how a student affairs division can incorporate student learning into its work.
One-Stop Student Services Centers

Beede and Burnett (1999), Burnett and Oblinger (2002), Javaheripour (2009), King and Fox (2007), Nealon (2005, 2007), Shugart and Romano (2008), Walters (2003), and Wells (2009) portray a one-stop student services center as a single location where students visit to receive assistance with student services such as admission, registration, and financial aid. Burnett and Oblinger state institutions utilizing a one-stop student services center offer a "combination of services that best fit the institution's objectives, students' needs, and institutional culture" (p. 8). The one-stop student services center provides a positive and personalized customer service experience through its staffing model (Beede & Burnett, 1999; Burnett & Oblinger, 2002). A generalist, frequently the first point of contact, has a breadth of knowledge in multiple areas. Cross-training provides the generalist the knowledge needed to provide students with correct information to routine questions and assist them to resolve a problem. Through cross-training, generalists learn about different student services areas, college enrollment and financial processes, and students' frequently asked questions (Pellicciotti, Agosto-Severa, Bishel, & McGuinness, 2002).

This section of the literature review uses institutional essays from Beede and Burnett (1999), Burnett and Oblinger (2002) and Sinsabaugh (2007); edited books and dissertations (Javaheripour, 2009; Johannes, 2012; Mitchell, 2011; Nealon, 2005); and other single institution essays (King & Fox, 2007; Shugart & Romano, 2008; Walters, 2003; Wells, 2009) to explain the one-stop student services center mission, services available to students, and program evaluation. The generalists' expertise and cross-training programs are also described since they are relevant to this study’s research
questions and findings. Institutional essays from journals and edited books expose practitioners to best practice models and are the resource for this literature review rather than other sources of practitioner information located in trade articles (Klein, 2006, LRP Publications, 2005; McClure, 2008; Supiano, 2011), presentations at professional conferences (Canady, Cooper, Cox, & Moncada, 2009; Leigh, 2010), and presentations and webinar sessions offered by various businesses (Academic Impressions, 2011; Innovative Educators, 2011; Progressive Business, 2007). Most of the institutions included in the literature review participated in an IBM Best Practice Partner Study designed to increase understanding of student services issues, trends, and models (Beede, 1999; Burnett, 2002).

Mission of One-Stop Student Services Centers

Mission statements from one-stop student services centers emphasize assisting students with student services, connecting students to academic support services, and building relationships with students that foster student learning and personal growth (Anderson & Elliott, 1999; Anderson 2002; Day & Pitts, 2002; Foucar-Szocki, Harris, Larson, & Mitchell, 2002). According to Raines (2012), the basis for the one-stop student service model is a student-centered philosophy that increases student engagement and may lead to positive student satisfaction and retention.

For example, Carnegie Mellon University's one-stop student services center mission includes: “facilitate student enrollment, guide students and families as administrative and financial partners, support university academic and administrative activities, fulfill the requirements of our external customers, and emphasize commitment and professional development among our staff” (Anderson & Elliott, 1999, p. 51;
Anderson, 2002, p.146). At Johnson County Community College (JCCC), “the Student Success Center is committed to providing support and assistance to JCCC students and Johnson County community members and their career/life and education planning and decision-making process in a developmental environment that encourages independence and personal responsibility (Day & Pitts, 2002, p. 74). James Madison University’s mission is “to design, implement, coordinate and assess learning opportunities (programs and services) that help students complete seamless transitions into, through, and out of the institution; that develop the student’s motivation to learn, engage in educationally purposeful activities, and assume self-responsibility; that are cohesive, supportive, and organized around common educational goals” (Foucar-Szocki et al, 2002, p. 81). These mission statements emphasize student enrollment, educational planning, and personal accountability through intentional activities in a supportive environment.

**Variety of Student Services**

The student services offered in a one-stop student services center facilitate different services, including students’ enrollment and financial activities (see Table 1). Several IBM study participants, including Carnegie Mellon University, New York Institute of Technology, Seton Hall University, and Southern Alberta Institute of Technology, included admission, registration, student accounts, and financial aid in their one-stop student services centers (Anderson & Elliott, 1999; Hayward, Pedersen, & Visser, 1999; Kleinman, 1999; Lonabocker & Wager, 2007; Nealon, 2005). In addition to admission, registration, student accounts, and financial aid, Babson College included career planning (Lewis, 1999) and academic planning (Kesner, 1995). At Onandoga
Community College, admission, registration, student accounts, and financial aid were supplemented with academic advising and placement testing (Walters, 2003).

Using a 4-year public STEM university's one-stop student services center for her dissertation study, Johannes (2012) conducted interviews of fourteen students and observations of activities for two days. She also reviewed the institution's website to consider students' expectations about the support they might receive at the one-stop student services center. The study revealed students, especially those developing their faculty advisor relationships, visited the one-stop student services center to discover additional resources and receive assistance in the areas of admission, registration, transcript evaluation, and graduation. Similarly, Southwest Community College students received assistance with admission, registration, and financial aid (Javaheripour, 2009). Additionally, instruction was offered to students on the institution's self-service computer system to facilitate registration and tuition payment.

Not all institutions include admission in their one-stop student services centers. Boston College emphasized registration and financial activities by including services related to registration, student accounts, financial aid, student employment, credit and collections, ID/Debt card, parking permits, public notary, and veterans services (Campanella & Owens, 1999; Kreinbring, 2002; Lonabocker & Wager, 2007; Nealon, 2005, 2007). Similarly, at the University of Minnesota's three one-stop student services centers (one per campus), students are assisted with processes related to registration, financial aid, and student accounts (Van Voorhis & Falkner, 2002). Financing also influenced the University of Pennsylvania's model (Claus, 2007) where student accounts and financial aid are integrated with other financial services.
Whereas there are some differences, these institutional essays and dissertations demonstrate that the admission, registration and records, financial aid, and student accounts are the student services most frequently offered at one-stop student services centers. If additional services are included, they tend to be academic and career services.

Table 1  

*Variety of Student Services in a One-Stop Student Services Center*

<table>
<thead>
<tr>
<th></th>
<th>Academic Advisement</th>
<th>Admission</th>
<th>Financial Aid</th>
<th>Registration and Records</th>
<th>Self-Service Instruction</th>
<th>Student Accounts</th>
<th>Other</th>
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<tbody>
<tr>
<td>Babson College</td>
<td>X</td>
<td>X</td>
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<tr>
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<tr>
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<tr>
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<tr>
<td>Southern Alberta Institute of Technology</td>
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<td>X</td>
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<tr>
<td>Southwest Community College</td>
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<td>X</td>
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<tr>
<td>University of Pennsylvania</td>
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</tr>
</tbody>
</table>

*Generalists' Domain of Knowledge*

Day and Pitts (2002) use the general medical doctor as a metaphor to enhance one’s understanding of the generalist expertise in a one-stop student services center. Like a doctor of general medicine, the student services generalist must have an “exceptional knowledge of a great many things” (Day & Pitts, 2002, p. 71). The generalist engages the student to diagnose his or her needs. Information is provided to the student and/or the student is routed to student service specialists who provide additional information or understanding. Outstanding interpersonal skills, attention to detail, and compassion are
necessary personal attributes for generalists (Day & Pitts, 2002). Additionally, a wide-
array of knowledge and expertise about college and higher education processes including
available campus resources is necessary for generalists to assist students and refer them
to other academic support resources.

Examples from the institutional essays illustrate the knowledge generalists use to
assist students with enrollment. At Johnson County Community College, generalists:
help students with admission, registration and financial aid; engage students in career and
educational planning; orient students to the campus, community, and support services;
and provide referrals to academic and career counselors, financial aid advisors, and
veterans and international student liaisons (Day & Pitts, 2002). Generalists know how to
help students through admission paperwork, explain the requirements of an academic
program and college policies, determine financial aid application requirements and status,
register for courses, and make tuition payments.

Generalist expertise at the University of Minnesota-Twin Cities pertains to
registration, financial aid, and student account policies and processes, allowing
employees to assist students with academic and financial decision-making (Van Voorhis
& Falkner, 2002). At Babson College, the generalists' knowledge about general
enrollment-related questions and policies and processes enhances their academic and
personal counseling (Lewis, 1999).

Generalists at Carnegie Mellon University understand a variety of college policies
and processes, including registration, financial aid, academic records, student accounts,
dining plans, and student ID cards, (Anderson & Elliott, 1999). Knowledge of
counseling skills is considered useful in providing excellent customer service since it
assists with determining parent and student needs and accepting responsibility to assist students with a concern through resolution of the issue (Anderson, 2002). Similarly, at Valencia Community College, the generalists' knowledge is not limited to enrollment processes and policies, but includes understanding about student learning (Shurgart & Romano, 2008). By focusing on student learning, the generalists go beyond answering single questions to describe processes more fully, including demonstrating the institution's self-service computer system that students use to register for courses, pay tuition and fees, and examine progress towards their academic degree.

Though instructive, the descriptions of generalists’ depth and breadth of knowledge and responsibilities in these essays are not consistent with Lonabocker and Wager (2007) who report generalists tend to provide routine information and complete repetitive tasks. Lonabocker and Wager cite the University of Delaware generalists’ work that is purportedly limited to creating student ID cards, accepting payments, and printing academic transcripts.

The knowledge a generalist possesses may vary from institution to institution. At a minimum, the generalists' knowledge should include routine enrollment activities. The generalists' knowledge may exceed routine tasks to assist students with their academic and financial decisions and ability to use self-service computer systems. Additionally, generalists may need interpersonal competencies such as customer service, communications, or education.

**Social Learning of Generalists**

Constant learning and training are necessary components for personnel in a one-stop student services center (Green, Jefferis, & Kleinman, 2002; Lonabocker & Wager,
Anderson (2002) suggested cross-training should focus on professional development and subject matter that includes teaching, learning, problem-solving, and building new knowledge and perspectives. Generalists should also obtain a vast amount of knowledge in multiple student services areas (Green et al., 2002), including interrelationships between them. Therefore, a new generalist is likely to need intensive training over an extensive period of time due to the amount of knowledge that must be acquired.

**Cross-Training.**

Cross-training may be provided through formal or informal means (Lonabocker & Wager, 2007). At Seton Hall, generalists and other student services professionals receive cross-training through conferences and seminars, regular staff meetings, weekly management team meetings, and weekly cross-training sessions related to admission, registration, financial aid, and student accounts (Green, Jefferis, & Kleinman, 2002). Professional staff members, not necessarily department heads, provide cross-training multiple times in a week to offer all employees an opportunity to attend and provide services to students. As employees interact with one another through the day, they have opportunities to discuss and convey knowledge. Archival knowledge is maintained in training manuals and frequently asked question databases.

The cross-training curriculum at Johnson County Community College developed through inter-departmental cooperation (Day & Pitts, 2002). Frequently asked questions provided the foundation for curriculum. Content experts from each student service department provided continuous training using a variety of methods, including staff meetings, one-to-one training, and small group training.
Some cross-training programs may go beyond learning specific student services knowledge. At James Madison University, generalists develop competencies in the areas of customer service, student learning, teamwork, program improvement, and student services policies and processes (Foucar-Szocki, Harris, Larson, & Mitchell, 2002). Competencies in these five areas became the basis for training employees and evaluating employee performance at James Madison University.

In the creation of the one-stop student service model at Carnegie Mellon University, leadership training broadened perspectives in order to improve processes and customer service (Anderson, 2002). The training emphasized taking initiative, developing a network, utilizing self-management, being a supportive colleague, contributing to team goals, creating effectiveness, and leading others. These characteristics helped: build relationships by placing greater emphasis on the team's ability to improve productivity, enhance work strategies, and increase organizational knowledge. The emphasis on leadership also allowed Carnegie Mellon University to underscore how an individual’s credibility, integrity, and accountability are closely linked to team success.

**New Employee Training.**

At the University of Minnesota-Twin Cities, a new employee who will be working as a generalist receives 12 weeks of training (Lonabocker & Wager, 2007) in registration, student accounts, and financial aid (Van Voorhis & Falkner, 2002). The university’s training program includes written materials with examples, observation, role-playing, and mentoring. Lonabocker and Wager claim the training benefits the institution
by increasing the generalists' talents and by providing staff members with more career opportunities.

According to Day and Pitts (2002), new employees who will be employed as generalists at Johnson County Community College receive 15 to 30 weeks of training. The new employee program includes one on one training, small group, full-staff, job shadowing, journaling, other written assignments. A new employee absorbs information for the first three weeks to develop a sense of what questions to anticipate from students. After three weeks, the trainee presents at new student orientations and begins working with students in person and over the telephone. After the initial training period, employees continue to develop skills and knowledge by leading mini-training sessions at staff meetings and mentoring less experienced staff. Professional development is provided at Seton Hall by involving other student service professionals, not department heads, in the cross-training in the areas of admission, finance, registration and records, and information technology (Kleinman, 1999).

**Program Evaluation**

Several metrics are used to evaluate the performance of a one-stop student services center using: (a) satisfaction surveys of students, parents, and internal customers; (b) data on student enrollment, student retention, and graduation; (c) telephone volume regarding calls answered and abandoned, as well as average wait time and average time per call; (d) student activity prior to deadlines related to registration, graduation, financial aid, and student billing; (e) office response time to incoming emails and returning telephone calls; (f) staff retention; (g) positive and negative feedback by staff and senior administrators; (h) benchmarking; and (i) strategic management through customer
service, internal processes, learning and development, and financial performance (Lonabocker & Wager, 2007). These sources of information assist with measuring productivity and customer service.

Results of a program evaluation conducted at Johnson County Community College showed a reduction in the number of student visits to the campus for assistance with the advent of their one-stop student services center. The data revealed more enrollment content was provided to a student in a single visit than in the past (Day & Pitts, 2002). The institution also recorded shorter wait time for assistance with applications, assessments, and registration. According to Day and Pitts, the centralized concept and personnel reinforced information presented at freshman orientation helped to create consistent messages early in the student matriculation process. Registration data and student satisfaction surveys were used for this evaluation.

Satisfaction surveys were utilized at several institutions. For example, Carnegie Mellon University analyzed student, parent, and employee satisfaction surveys (Anderson & Elliott, 1999). Tufts University surveyed students familiar with the decentralized student services model used prior to the one-stop student services center. Survey responses indicated whether or not the new model met students' needs better than the decentralized model (Dillon, 2002). Annual student satisfaction survey data provided Seton Hall with information to improve their operation (Green, Jefferis, & Kleinman, 2002). Eighteen months after the opening of the new one-stop student services center at Boston College, a parent satisfaction survey was conducted by an independent agency (Kreinbring, 2002). Mitchell (2011) used SERVQUAL, an instrument to measure service quality, to examine new students’ perceptions of the University of North Carolina
Asheville's one-stop student services center. Surveyed students ranked the service quality as high.

In addition to measuring student satisfaction, Carnegie Mellon University tracked enrollment processes, including financial aid processing, payment, and registration holds (Anderson, 2002). Performance evaluation at Carnegie Mellon University assessed employees’ behaviors associated with achieving its organizational mission, including customer service, teamwork, initiative, communication, and problem solving.

**One-Stop Student Services Center Summary**

The primary objective of a one-stop student services center is to foster student learning related to enrollment, including financial aid, to improve students' decision making and satisfaction. In a one-stop student services center, departments come together in a single location and offer a variety of student services. Rather than requiring students to visit multiple departments to complete enrollment and financial activities, the one-stop student services center employs generalists who answer common questions and assist students. Services frequently offered at one-stop student services centers include admission, registration, financial aid, and student accounts. Table 2 defines one-stop student service characteristics relevant to this study.

Knowledge is shared with new employees who seek to be generalists through formal cross-training programs and during daily interactions with other employees. Formal and informal social learning opportunities promote interdepartmental communication, teamwork and campus specific information such as policies and procedures related to enrollment, financial aid, student accounts, registration, and records.
that foster interdepartmental communication and teamwork. Training and coaching exposes generalists to the breadth and depth of knowledge needed to assist students.

The domain of knowledge required by the generalists is an "exceptional knowledge of a great many things" (Day & Pitts, 2002, p.71). Expertise in college enrollment and financial policies and procedures, including academic support resources, fosters the generalists' abilities to assist students. Additionally, a generalist's insights into customer service, communication, and instruction help to identify students' needs and determine the information and activities to provide them. Whereas the literature sheds light on broad topics, it does not provide the in-depth information about enrollment and financial knowledge that generalists’ need.

Generalists acquire knowledge through formal and informal social learning activities. Cross-training provided by departmental experts and discussion of everyday activities builds student affairs professionals with knowledge about the institution's enrollment and financial policies and procedures. Some institutions may include training related to student learning and student satisfaction, teamwork, and student services processes. Institutions utilizing the one-stop student services model also paid special attention to the orientation of new generalists by creating experiences to expose them to the breath and depth of knowledge needed to assist students. However, the literature does not identify the frequency of formal cross-training, variety of topics, or assessment methods. The sharing of tacit knowledge through everyday observations of other employees is also omitted from institutional case studies. Whereas tacit knowledge is difficult to measure, observations of everyday work is one of the ways employees may share knowledge (Polanyi, 1966).
Improvement to practice is based on a variety of metrics. Usage data and satisfaction surveys are common measurement tools to understand productivity and customer service. Assessment of student learning pertaining to student services processes or concepts was not included in the literature.

Table 2

*Literature on One-Stop Student Services Center Features*

<table>
<thead>
<tr>
<th>Citation</th>
<th>Features</th>
</tr>
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</table>
| Anderson & Elliott, 1999; Anderson, 2002; Day & Pitts, 2002; Foucar-Szocki, Harris, Larson, & Mitchell, 2002 | Mission:  
• Supportive partnerships with students  
• Foster student learning and personal growth  
• Support students' enrollment and financial decision-making  
• Connect students to academic support services |
• Services vary by institution--may included: academic planning, admission, career planning, cashiering, credit and collections, financial aid, ID cards, registration/records, parking permits, public notary, student employment, veterans services |
| Anderson & Elliott, 1999; Day & Pitts, 2002; Green, Jefferis, & Kleinman, 2002; Shugart & Romano, 2008 | Generalists' Domain of Knowledge:  
• Enrollment knowledge, including financial aid, regarding college policies and processes  
• Students' self-service screens and processes  
• Customer service  
• Student learning  
• Academic support services |
| Anderson, 2002; Foucar-Szocki, Harris, Larson, & Mitchell, 2002; Green, Jefferis, & Kleinman, 2002; Lonabocker & Wager, 2007 | Social Learning Experiences:  
• Continuous cross-training (formal and informal)  
• Curriculum includes enrollment processes including financial aid, teaching, learning, problem-solving, building new knowledge, customer service, and institutional goals |
College Knowledge

College knowledge refers to students’ skills and abilities related to college and career readiness, including their understanding of college norms, values, and conventions to gain entry to and progress within the higher education system (Conley, 2007, 2008, 2010, 2012). It is critical for the student to possess this knowledge since college is more likely to be the first significant experience, following high school, when the individual is considered an independent adult rather than a child (Conley, 2007). When students do not have the context to understand what is expected, students may "become alienated, frustrated, and even humiliated during their freshman year and decided college is not the place for them" (Conley, 2007, p. 13). Examples of college knowledge include college admission requirements; financial aid; different types of colleges and their missions; college culture; and academic support and service resources. Also, college students need the ability to build relationships with faculty and other college employees to enhance their skills and awareness (Conley, 2012). The following studies reveal the barriers students, who lack college knowledge, are more likely to experience in college.
High School Students

High school graduates may not have obtained college knowledge, in part, due to the unequal distribution of resources available to secondary schools across the country (Venezia & Kirst, 2005). A six-year national study referred to as the Bridge Project examined transitions that high school students experience between graduation and college. Understanding this transition is important because more than 70% of high school graduates enroll in college within two years of their graduation, but less than half go on to earn a bachelor's degree (Kirst & Bracco, 2004). College knowledge refers to students’ understanding of college costs, course placement exam policies, and admission policies. Students who lack this type of understanding are considered to be less prepared for the challenges of college and more likely to enroll at a less selective higher education institution, such as a community college, than elite students who understand the processes to gain entry and enroll at selective colleges or universities.

The Bridge Project collected data from a survey in six states, including individual interviews with 37 California teachers, counselors and administrators; two focus groups with 60 California students; and academic transcript analysis (Kirst, Venezia, & Antonio, 2004). Findings from the portion of the study associated with college knowledge included: (a) approximately 30% of students identifying the specific high school courses associated with college-level readiness, (b) less than 50% of students knowing required placement tests for local colleges, (c) less than 12% of students confirming an understanding of required high school courses for college admission, and (d) an understanding that costs vary among type of institution, but universal overestimating of
college costs. Altogether, these findings indicate a gap in knowledge about how to gain entry to a college or university.

Many high school students find the process of reading college materials dull and express a preference for an educator to explain the information in a step-by-step manner. The majority of students seeking college advice turned to a parent, counselor, or teacher (Kirst, Venezia, & Antonio, 2004, p. 294); however, high school counselors often lack the time needed to support all students, and teachers feel unprepared to provide up-to-date information resulting in their providing students with general information about admission and placement policies. The researchers claim this situation may result in misperceptions about difficult concepts such as financial aid, college pricing, academic preparation, community college academic standards, and college degree completion requirements. Students report common myths such as: "I can't afford college; getting into college is the hardest part; and community colleges don't have academic standards" (Kirst et al., 2004, p. 295). High school counselors recommended higher education institutions emphasize, in their marketing, information about college admission and college readiness in order to make it easier for students to understand the types of academic programs/majors, courses, academic program requirements, graduation requirements, and occupational outlook.

Bell, Rowan-Kenyon, and Perna (2009) examined ninth and eleventh grade students' understanding of financial aid, college costs, and college preparation by socio-economic status (SES) to consider student's college knowledge related to affordability. Their case study of 15 high schools (3 schools from each state-California, Florida, Georgia, Maryland, and Pennsylvania) focused on understanding what students know and
how they have learned the information. They used focus groups with 9th and 11th grade students and parents, and semi-structured interviews with teachers and counselors representing 596 participants. They found 9th graders tend to believe scholarships are awarded for academic and athletic achievement, but not for financial need. They are not able to estimate college sticker prices accurately. Ninth graders are also more likely than eleventh graders to report specific financial aid programs such as the federal Pell grant or a state grant program and they are not more likely than eleventh graders to know about the federal financial aid application process. Eleventh graders are more likely than ninth graders to estimate college sticker prices accurately; however, they fail to grasp the concept of net college price, which is the difference between college sticker price versus financial aid. Additionally, Bell, Rowan-Kenyon and Perna found students from Georgia and Florida are more likely to understand the academic merit requirements for a state college scholarship than students whose states provided state scholarships based on a financial need.

Students from each grade said their knowledge of college and financial aid comes from posters, such as scholarship announcements, school announcements, the internet, and specific websites such as the Fastweb scholarship search, CollegeBoard, or individual institutions of higher education. Ninth grade students tend to rely on family and friends for information, whereas eleventh grade students report talking with teachers, college counselors, and career centers. Access to college counselors varies, but all students consider these professionals a key resource. Also, knowledge about college processes, including financial aid, is higher among students participating in an early intervention program such as Upward Bound. Similarly, students attending a high school
serving higher income families are more knowledgeable than students who attend a high school serving low to middle income families or who do not participate in an early intervention program (Bell, Rowan-Kenyon & Perna, 2009). Kirst, Venezia, and Antonio (2004) and Bell et al. (2009) contend college knowledge is gained through a variety of sources, including printed materials, internet web sites, parents, students, and counselors. Whereas these studies consider institutional processes, they fail to examine and closely detail the role of college staff in helping incoming students develop college knowledge.

Bell et al. (2009) and Kirst et al. (2004) include the admission and financing processes in their definition of college knowledge. Admission processes include high school activities such as course curriculum, ACT or SAT testing, and the criteria colleges use to determine admission. Financing processes incorporate understanding college costs and financial aid. Conley (2007) expands the definition of college knowledge to include an understanding of U.S. higher education, including available majors and curriculum, dates and deadlines, and college norms and culture. Conley includes the ability to use information and ask questions as one of several features of college knowledge (Table 3).

Table 3

<table>
<thead>
<tr>
<th>Citation</th>
<th>Features</th>
</tr>
</thead>
</table>
| Bell, Rowan-Kenyon, & Perna (2009) | • College costs  
                          • Financial aid  
                          • College selection criteria  
                          • Degree/education needed for career aspirations |
Community College Students

In a series of qualitative and quantitative studies, Deil-Amen and Rosenbaum (2003) and Rosenbaum, Deil-Amen, and Person (2006) concluded that limited college knowledge and understanding about higher education can negatively affect access and success for community college students. Knowing about admission, course registration, and financial aid helps students to access advice, to make sensible financial decisions, and to make decisions that affect persistence. Specifics of the research that laid the groundwork for these conclusions are given below.
In a study of 14 colleges, 7 public community colleges and 7 private 2-year institutions, Deil-Amen and Rosenbaum (2003) found community colleges had barriers that challenged students who were unfamiliar with college processes. Relative to private 2-year institutions, community colleges were more likely to expect students to take responsibility to discover the enrollment process and for-profit 2-year institutions were more likely to develop a system to support student enrollment and success. Community college barriers include the myriad of curricula that appear in the college catalog and class schedules that make it difficult for students to select courses relevant to their educational goals. Additional barriers include enrollment and registration processes, financial aid application processes, and course scheduling that takes into account course prerequisites, and work and family demands on the students’ time.

Deil-Amen and Rosenbaum (2003) also note that, whereas advising is sometimes available, it is often not mandatory. Optional advising creates consequences for first-generation college students, including limiting their awareness of college resources and leading to unclear expectations about the timeframe to request resources. The community colleges studied by Deil-Amen and Rosenbaum lacked sufficient resources, such as academic advisors, to help students plan schedules, create educational goals, and determine the transferability of courses. Students who were able to meet with an academic advisor criticized the information shared by these advisors because they felt it was conflicting or incorrect. Deil-Amen and Rosenbaum concluded that, when students do not understand the system and receive inadequate advising, they do not understand their developmental courses do not provide college credit or count towards graduation or
transfer to a 4-year institution, thus extending time to degree and increasing the students’
total tuition costs.

Deil-Amen and Rosenbaum (2003) contrasted the community college enrollment
process to the structure offered at a for-profit 2-year institution where occupational
course offerings direct students to take specific courses in a particular order. At the time
of admission, a financial aid advisor meets with each student to explain the process and
offer support. Academic advising is not optional. An academic advisor meets with
students to explain the course sequence, expectations, and employment options. The
advisor monitors academic progress each term. Additional advisors are hired to provide
job placement assistance. Year round course schedules help students maintain a
consistent academic schedule and provide an option for students to re-enter a program if a
non-academic emergency arises. This structure helps students who are unfamiliar with
college processes to navigate the enrollment process and gain access to postsecondary
education.

Person, Rosenbaum, and Deil-Amen (2004) studied seven public community
colleges and seven for-profit two-year institutions to examine students’ informational
needs and institutional responses. Interviews with nearly 100 students and 100 college
administrators showed students lack college information, and this lack of information is
detrimental to their decision-making. Community college administrators reported
financial resources limited their ability to add advisors and counselors, leading them to
compensate for the lack of personnel by providing students with written information,
such as a catalog or student handbook. When additional written information is provided,
college administrators assume students have time to read it, understand it, and self-assess
how it applies to their situation. Person, Rosenbaum, and Deil-Amen concluded that community college students are more likely to experience negative consequences if they are unfamiliar with college processes and do not have time to contact an advisor or counselor. By comparison, students at for-profit institutions reported the focused curriculum led to a degree as quickly as possible with little concern about the lack of course exploration. Person, Rosebaum, and Deil-Amen argued that if community colleges improved their dissemination of information, students would have more confidence in completing a degree and reduce the likelihood of withdrawing or turning to another person for information.

Supporting persistence and success through structure at a community college is the focus of Scott-Clayton's (2011) literature review. Structure is defined as explicit college policies and procedures as well as institutional norms that influence a student's decisions. By providing structure, community colleges help students develop the knowledge they need to form educational goals, and develop academic plans and then implement their strategies. Building on Rosenbaum, Deil-Amen, and Person (2006) who found too many academic program and course options, confusing and complicated financial aid processes, and frustrating course registration systems that impeded persistence, Scott-Clayton revealed promising programs and suggestions for the future including: intrusive academic advising; technology in the areas of career and educational exploration, course planning, and faculty early warning indicators; learning communities; and fewer academic programs and less course options. Future research, according to Scott-Clayton, is needed to understand how students manage the college bureaucracy, including course registration, college paperwork, and financial aid. Future research
should also consider office operations, hiring additional staff, and staff training. Improving the delivery of financial aid may be the most critical area of need for all community colleges, as noted by Miller, Pope, and Steinmann (2005) who surveyed 300 students in six community colleges and found paying for college was one of the top three challenges community college students experience.

Karp and Hughes (2008) used qualitative methods to study how institutional information networks influence students’ perceptions and persistence at two urban community colleges. Information networks are "social ties that facilitated the transfer of institutional knowledge and procedures" (Karp & Hughes, p. 76). The researchers sought to understand how relationships supported learning about professors, courses, and student services from professors or classmates. Students who reported having a network also had a sense of belonging created by their connections, social contact, and access to information and support. Students reported developing their network in the classroom, and student success courses were a catalyst to creating networks since faculty encouraged student interaction, invited guest speakers to discuss support services, and contacted faculty who focused on persistence. Karp and Hughes also observed that students who knew how to create resources were more likely to have developed a network than students who had less prior success building resource and support. Unfortunately the students with less success building a network were also students who were most in need of institutional support. Whereas this study acknowledges students benefit from information that helps them navigate through the college system, it does not take into consideration how social ties with community college staff assist students except to
mention students with an information network use it to expand on general academic advising information.

In a more recent study along these lines, Karp (2011) considered how student persistence theories and program evaluation literature can identify non-academics supports to help students succeed. She reviewed 128 books, journal articles, and reports and concluded that support for student success comes from four areas: "creating social relationships, clarifying aspirations and enhancing commitment, developing college know-how, and making college life feasible" (Karp, 2011, p. 6). College know-how included learning college processes and culture and success strategies such as study skills, resume-writing, and student support services. The notion of developing college know-how, mentioned by Karp, connects nicely with Conley's (2007) ideas about college knowledge and also connects to Tinto's (1993) claim that students must learn the college's unwritten rules to persist. Karp argues a means of systemizing the development of college knowledge is to require students to take student success courses, to insist on faculty teaching academic success strategies as part of their course curriculum, and to limit students' course selection. Her last recommendation gets most closely to the kinds of advisory functions that might be done by student services professionals.

**College Knowledge Summary**

College knowledge includes information such as college admission processes, ACT and SAT exams, high school courses, college costs, and financial aid (Bell, Rowan-Kenyon, & Perna, 2009; Conley, 2007, 2008, 2010, 2012; Deil-Amen & Rosenbaum, 2003; Rosenbaum, Deil-Amen & Person, 2006; Karp, 2011; Kirst, Venezia, & Antonio, 2004), and it is necessary to make admission, enrollment and financial decisions.
Understanding college norms, values, conventions, institutional culture, and using information and asking questions supports enrollment in college and persistence (Conley, 2007, 2008, 2010, 2012). Deil-Amen and Rosenbaum (2003) and Rosenbaum, Deil-Amen, and Person (2006) conclude that limited college knowledge and understandings about higher education can negatively affect access and success for community college students. Yet, a community college's policies, processes, institutional norms (Scott-Clayton, 2011), and information networks (Karp & Hughes, 2008) are types of support institutions can provide to support students' development of college knowledge.

Whereas current research provides limited information on how high school faculty and others should supply students with college knowledge, it does not indicate how community college student services professionals should support the development of college knowledge in their interactions with students to help them navigate admission, financial aid, course registration, and tuition payment. Additional research is needed about institutional support that will help students to make informed decisions about enrollment processes and enrollment problems (Rosenbaum, Deil-Amen, & Person, 2006; Scott-Clayton, 2011), and this research will increase understanding of the role professionals play in advancing community college students' college knowledge.

**Review of Literature Summary**

One-stop student services centers are dedicated to fostering student learning and personal growth related to enrollment activities (Anderson & Elliott, 1999; Anderson, 2002, Day & Pitts, 2002; Foucar-Szocki, Harris, Larson, & Mitchell, 2002). A generalist student services professional can assist students with common questions about college enrollment processes, provide routine services, and connect students to academic support
services (Anderson & Elliott, 1999; Day & Pitts, 2002; Green, Jefferis, & Kleinman, 2002). To build generalists' knowledge, one-stop student services centers utilize cross-training (Anderson, 1999; Foucar-Szockiet al, 2002; Green et al, 1999; Lonabocker & Wager, 2007), but it is unclear whether generalists receive instruction that supports student learning related to college knowledge.

Some community college students need to be provided instruction to build their college knowledge, particularly on topics such as college admission processes, ACT and SAT exams, high school courses, college costs, and financial aid (Bell, Rowan-Kenyon & Perna, 2009; Conley, 2007, 2008, 2010, 2012; Deil-Amen & Rosenbaum, 2003; Karp, 2011; Kirst, Venezia & Antonia, 2004; and Rosenbaum, Deil-Amen, & Person, 2006). College knowledge appears to be necessary for students to make admission, enrollment, and financial decisions. In addition to college knowledge that supports enrollment in college, Conley also considers an understanding of college norms, values, conventions, and culture, and the ability to use information and ask questions important to navigating higher education institutions.

The conceptual framework, the community of practice, is a group of people with a shared interest, in participating in social learning activities to develop knowledge that contribute towards practice (Wenger, 1998). Three essential components compose a community of practice, and these are “a domain of knowledge, which defines a set of issues; a community of people who care about the domain; and the shared practice that they are developing to be effective in their domain” (Wenger, McDermott, & Snyder, 2002; p. 27). These three components frame this study and support an examination of
literature pertaining to the generalists' domain of knowledge, social learning activities, and contributions towards building community college students' college knowledge.

**Generalists' Domain of Knowledge**

The domain of knowledge of generalists includes a "great many things" (Day & Pitts, 2002, p. 71). Expertise in enrollment processes permits generalists to answer students' common questions about college and higher education processes in the areas of academic advising, admission, career advising, financial aid, registration, records, and student accounts (Anderson & Elliott, 1999; Campanella & Owens, 1999; Hayward, Petersen, & Viser, 1999; Kesner, 1995; Kleinman, 1999; Kreinbring, 2002; Lewis, 1999; Lonabocker & Wager, 2007; Nealon, 2005; Van Voorhis & Falkner, 2002).

Whereas the literature presents the generalists' expertise related to enrollment processes, it does not clarify topics that require a breadth verses depth of knowledge. The literature also does not discuss the shared interests of generalists, as a community of practice, that unite them, foster discussion or lead to cross-training. Finally, whereas some essays emphasize customer service (Beede & Burnett, 1999; Burnett & Oblinger, 2002), the literature does not provide an understanding of activities that generalists consider important to student learning.

**Social Learning Activities**

Cross-training is considered a means for generalists to acquiring the expertise necessary to assist students in a one-stop student services center (Day & Pitts, 2002; Green, Jefferis, & Kleinman, 2002; Lonabocker & Wager, 2007). Regular employee interaction, staff meetings, and professional development may also provide opportunity for generalists to build their domain of knowledge. Some institutions create activities
that go beyond learning enrollment processes such as customer service, student learning, teamwork, program improvement, and student service policies and processes improvement (Foucar-Szocki, Harris, Larson, & Mitchell, 2002) and leadership (Anderson, 2002). Also, when a new employee is brought into a one-stop student services center, the individual participates in a series of activities that build their domain of knowledge.

Whereas the literature indicates cross-training is a means of building generalists' knowledge, the institutional essays do not present the models institutions use to develop, conduct, or evaluate their cross-training curriculum. References to observation as a tool also do not disclose the tacit knowledge generalists might gain from observing their colleagues assisting students.

Practice

Central to generalists' work is answering students’ enrollment and financial questions. The literature indicates that student satisfaction and usage data is a means to evaluate the work of a one-stop student services center (Anderson, 2002; Anderson & Elliott, 1999; Day & Pitts, 2002; Green, Jefferis, & Kleinman, 2002; Kreinbring, 2002; Lonaboeker & Wager, 2007). However, it is not clear from the literature how generalists' might build students' college knowledge. Since limited college knowledge can negatively affect students' access and success at a community college (Deil-Amen & Rosenbaum, 2003), additional research is needed about student problems and processes that help them make informed choices (Rosenbaum et al, 2006; Scott-Clayton, 2011). Additional research is needed to fill this gap in the literature.
The literature about generalists at a community college one-stop student services center, through the framework of a community of practice, provides a glimpse into their domain of knowledge, their social learning activities, and practices related to helping students develop college knowledge. Table 4 displays the three components of a community of practice and related understandings from institutional essays and dissertations.

Table 4

*Community of Practice and Generalists in a One-Stop Student Services Center*

<table>
<thead>
<tr>
<th>Community of Practice Components</th>
<th>One-Stop Generalists' Community of Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared interest</td>
<td>• Working with students in supportive partnerships in order to foster student learning and personal growth when assisting with student services and connecting to academic support services (Anderson &amp; Elliott, 1999; Anderson 2002; Day &amp; Pitts, 2002; Foucar-Szocki, Harris, Larson, &amp; Mitchell, 2002).</td>
</tr>
<tr>
<td>Understandings and open questions</td>
<td>• An &quot;exceptional knowledge of a great many things&quot; (Day &amp; Pitts, 2002, p 71) such as admission, registration and financial aid knowledge that may be able to support students in:</td>
</tr>
<tr>
<td>Desire to develop additional competency and expertise to improve practice</td>
<td>• College selection criteria</td>
</tr>
<tr>
<td>(Wenger, McDermott, and Snyder, 2002)</td>
<td>• College admission process</td>
</tr>
<tr>
<td></td>
<td>• College admission deadlines and timeline to meet deadlines</td>
</tr>
<tr>
<td></td>
<td>• College placement tests</td>
</tr>
<tr>
<td></td>
<td>• Financial aid options</td>
</tr>
<tr>
<td></td>
<td>• Financial aid deadlines</td>
</tr>
<tr>
<td></td>
<td>• Financial aid documents</td>
</tr>
<tr>
<td></td>
<td>• Career options</td>
</tr>
<tr>
<td></td>
<td>• Career requirements</td>
</tr>
<tr>
<td></td>
<td>• Responsibility to utilize information and ask questions to supportive adults</td>
</tr>
<tr>
<td></td>
<td>• Types of higher education institutions</td>
</tr>
</tbody>
</table>
Table 4 (cont.)

<table>
<thead>
<tr>
<th>Community of Practice Components</th>
<th>One-Stop Generalists' Community of Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Types of college majors and curriculum including challenge level of college courses</td>
</tr>
<tr>
<td></td>
<td>• Understanding of the college norms, values and conventions/college culture</td>
</tr>
<tr>
<td></td>
<td>• Orienting students to the campus, community, and support services,</td>
</tr>
<tr>
<td></td>
<td>• Referrals to areas such as academic and career counselors, financial aid advisors, and veterans and international student liaisons (Day &amp; Pitts, 2002)</td>
</tr>
</tbody>
</table>

**Social Learning**

<table>
<thead>
<tr>
<th>Regular interaction regarding domain</th>
<th>Continuous training (formal or informal) and learning (top-down and bottom-up) regarding domain (Green, Jefferis, &amp; Kleinman, 2002; Pellicciotti, Agosto-Severa, Bishel, &amp; McGuinness, 2002)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal or informal leadership</td>
<td>• Cross-training, in a collaborative work environment, must focus on professional development and subject matters that include teaching, learning, problem-solving, and building new knowledge and perspectives (Anderson, 2002)</td>
</tr>
<tr>
<td>Generates common approaches, shared understandings and solutions to problems</td>
<td>(Wenger, McDermott, &amp; Snyder, 2002).</td>
</tr>
</tbody>
</table>

**Practice**

<table>
<thead>
<tr>
<th>Knowledge developed, shared, and maintained to do or make something</th>
<th>• New employee training, training materials, office manuals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desire to solve problems and continually improve through innovation</td>
<td>• Information shared with students</td>
</tr>
<tr>
<td>(Wenger, McDermott, and Snyder, 2002)</td>
<td></td>
</tr>
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CHAPTER 3
RESEARCH METHODS

This chapter explains the qualitative single case study research design and methods used in this study. The information presented includes the site selection process, participant selection and recruitment, informed consent, data collection, and data analysis, including trustworthiness. Through observation, interviews, and document analysis, this study examined how generalists in a community college one-stop student services center build shared knowledge that supports students’ development of college knowledge. College knowledge refers to admission, financial aid, and college system and culture necessary to matriculate and function as a successful learner (Conley, 2008, p. 10). This study analyzes the work of generalists through the three components common to a community of practice: the domain or expertise within the generalists’ community of practice; the generalists shared knowledge built through cross training and other learning activities; and the generalists' application of shared knowledge towards supporting the development of students' college knowledge (Wenger, 1998).

Research Design

A qualitative design is appropriate because the relevant variables needed for a quantitative study have not been fully developed (Marshall & Rossman, 2006), a quantitative instrument does not exist to answer the research questions (Patton, 2002), and the interrelationships between the generalists employed in a one-stop student services center are most likely highly nuanced and complex (Stake, 1995). This detailed single case study, using naturalistic inquiry and multiple data sources associated with inductive data analysis (Patton, 2002), yields the thick description (Geertz, 1973) necessary to
create fuller understanding. Therefore, the best means of examining the generalists operating as a community of practice (i.e., creating shared knowledge through cross-training and other social learning activities and contributing towards the development of students' college knowledge) is through qualitative research. The study's design is aligned with the postpositivist paradigm and examines the objective realities of the case while understanding that the phenomena occurs within a cultural and historical context (Patton, 2002).

**Case Study**

This qualitative case study focuses on a single case that also allows for an in-depth examination of the target phenomenon. According to Stake (1995), an in-depth case study provides opportunity to understand several complex dimensions of a phenomenon. In this case, the complex phenomenon is the generalists operating as a community of practice that include their domain of knowledge, shared knowledge created through cross-training and other social learning activities, and their contributions toward developing students' college knowledge. Bounding this study in one community college one-stop student services center optimized understanding of how the community college context shaped the individual and collective understandings and behaviors of generalists who were part of the larger organizational culture. According to Stake, it may be useful to document facets outside the boundaries of a case to better understanding the case. In this study, some of the facets that fell outside the boundaries of this case, as this study unfolded and as originally conceived, were considered as part of the larger organizational context, including the role and interactions of the generalists with students and other departmental student affairs staff.
This study used methods to examine the in-depth, lived experiences of the generalists in building shared knowledge and working to support students’ college knowledge "within a contextual setting" wherein contextual setting refers to the institution (Patton, 2002, p. 68). Stake (1995) refers to studies that seek to better understand a particular case and use findings to develop broader and universal conclusions as instrumental case studies. Observation, interviews, and document analysis provide the necessary methods to become intensely immersed in the case and a means to carefully consider the complexities and uniqueness of the case, including its culture and environment.

The culture and environment of this case include: (a) the community college's institutional history, enrollment, and budget; (b) the physical setting of the one-stop student services center; (c) the personnel and professional backgrounds of employees, including education levels, employment history, and job description; (d) the past performance of the unit, including annual student contacts (visits, telephone calls, email messages), annual admission applicants, and annual financial aid applicants; and (e) other performance measures, such student satisfaction or student learning related to work performed in the one-stop student services center. In gathering these data on context, what matters is that this researcher and hopefully readers of this dissertation understand patterns that emerge through data collection and data analysis since these patterns are uniquely applicable to this specific case.

**Site Selection**

An "information rich" (Patton, 2002, p. 242) site was selected for this in-depth case study. The site is a one-stop student services center at a Midwest comprehensive
community college that includes the generalist position in the staffing model. The
generalist duties include providing students with a variety of information and options and
assisting them with administrative activities, such as applying for admission, adding or
dropping a course, and paying a bill. Generalist duties also include providing financial
aid information since Conley (2007, 2010) and others (CCCSE, 2008; Hagedorn,
Perrakis, & Maxwell, 2004; Karp, 2011; Miller, Pope, & Steinmann, 2005; Scott-
Clayton, 2011) link financial aid to persistence at a community college. This site
supports generalists learning through cross-training and other social learning activities
and provides the means to examine how generalists create shared knowledge related to
helping students develop college knowledge. Purposeful selection of this site provided
the opportunity to gain a wealth of information (Patton, 2002; Stake, 1995; Yin, 2009)
about the generalists acting as a community of practice and building shared knowledge to
support students’ college knowledge.

According to Patton (2002), there are multiple approaches in purposeful sampling.
A combination sampling strategy (Patton), utilizing critical case sampling and snowball
sampling, aided in locating a site that demonstrated the one-stop student services center
characteristics included in this study. In early January 2013, I emailed a 1-page
description of this study (see Appendix A) to senior student services officers at Midwest
community college and individual professional contacts who are recognized experts on
one-stop student services centers, including Julie Selander, who served as Interim
Director of the one-stop student services center at the University of Minnesota and Dr.
Dennis Day, Vice-President of Student Success and Engagement at Johnson County
Community College. Information was sought from experts and chief student services
officers to generate referrals and recommendations in the absence of a professional association of practitioners responsible for one-stop student services centers. Within a few days of securing referrals from this group, I received positive responses from several institutions and began to arrange telephone appointments for additional screening.

This additional screening was conducted over the telephone with three institutions to clarify my role as a doctoral student researching one-stop student services centers and gathering information from the senior student serviced officer about: whether or not the institution uses the generalist position; the duties of the generalist position, if used; and the cross-training and other social learning activities, including written training information provided to generalists, if relevant. Information such as organizational mission, frequency of in-person student visits, frequently asked student questions, and services provided by the generalists to secure a site that would provide sufficient data for this study. The information gathered through this method revealed two potential sites for an informational visit.

Informational site visits, conducted in February 2013, provided an opportunity to gather additional insights into the two recommended sites. The visits focused on clarifying information provided over the telephone and gathering additional context including the office layout, office culture, interactions between generalists, and interactions between generalists and students. Both visits provided time to meet with the vice president of student affairs to help me form impressions and consider whether or not the institution would choose to participate in the study. The vice president of student affairs also explained the community college's process of securing approval for a research study.
After visiting the two sites, one institution was selected using a variety of factors, including generalists who provided, at a minimum, information about admission, financial aid, registration, and records to ensure an extensive breadth of information is provided to students; information about cross-training in order for generalists to integrate student services information; information about improvement processes; and information about a sufficient number of in-person contacts between students and the generalists related to supporting students in the development of college knowledge. A cross-training program and regular interaction among the generalists provided an understanding of how generalists create shared knowledge about supporting students’ development of college knowledge. Additionally, I considered the layout of the one-stop student services center and how it might enhance interactions between the generalists and students as well as interactions among the generalists. Finally, the office's culture was another consideration that influenced whether or not the participants were genuinely interested and able to freely participate in the study.

The first site visit arranged a meeting with the assistant to the vice president of student affairs, one-stop student services center supervisor, director of financial aid, and registrar. The second site visit included the vice president of student affairs introducing me to the director of financial aid and registrar as we toured the office. Generalists were introduced to me at each location. Whereas generalists’ responsibilities and cross-training was similar at each institution, there was a striking difference between the two campuses related to improving processes. At the first site visit, there were eight flipchart pages, with notes, hung along the walls of the conference room. On these large paper sheets, a note-taker had scribed strengths, weaknesses, opportunities, and threats related
to improving student services operations, including the one-stop student services center. As the other administrators shared the development of their operation and current activities, they explained how the notes, hanging in the conference room, were products of their cycles of continuous improvement program. The second site visit did not have recurring process improvement activities and current planning activities related to moving into new physical space. Improving practice, a component of Wenger's (1998) community of practice, emerged as a serendipitous distinction between sites. The first institution I visited appeared to align better with community of practice than the second institution.

Table 5

*Site Selection Criteria and Ratings*

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Site 1</th>
<th>Site 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generalists who provide students information about admission, financial aid, registration and records</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Cross-training program</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Activities to improve processes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Sufficient in-person visits</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Office Layout</td>
<td>Students sat across desk</td>
<td>Students stood at counter and college designing new one-stop facilities</td>
</tr>
</tbody>
</table>

After ranking the sites one and two on the abovementioned criteria, I contacted the vice president of student affairs at my preferred site, site one, to determine whether or not the top-ranked institution would participate. The institution was interested. The institution did not require a separate Institutional Review Board (IRB) application. The
vice president of student affairs, also the chief research administrator, requested a copy of
the University of Illinois's IRB application and approval letter. After emailing her these
documents, I received a letter from the community college president granting approval
for this study. This letter was submitted with an amended IRB application to the
University of Illinois's IRB office.

**Participant Selection**

After finalizing the site, I spoke with the one-stop student services supervisor and
generalists, at their request, to explain again the purpose of the study, methods, and the
participation requirements involving observations and interviews. Following the
telephone conversation, I emailed the supervisor and three generalists a consent form. I
collected the four signed consent forms during my first site visit. Though not part of the
one-stop student services center per se, I also sent the vice president of student affairs an
invitation via email to explain the purpose of the study, methods, and consent form,
which this individual signed and returned to me during my second visit. Due to
personnel changes in the midst of this study, I asked two additional individuals to
participate in interviews and observations. A change in supervisors occurred between my
first and second visit and between my second and final visit, resulting in another
generalist working in the one-stop student services center. These two individuals agreed
to participate in the study. Since my office observation included the interpersonal
interactions a generalist has with students, I pragmatically asked students who visited the
one-stop student services center if they would permit me to observe their meeting and
those who agreed signed a consent form. I explained to the students my status as a
graduate student attending the University of Illinois at Urbana-Champaign, and my
study’s purpose, my obligation to use pseudonyms to protect privacy, and the requirement of a signed consent form to allow individuals to participate. This included observations of student conversations focused on topics related to admission, financial aid, course registration, tuition payment, and other college policies or processes that help students develop college knowledge.

**Informed Consent and Ethical Issues**

Protection of human subjects is an important consideration since I studied a real-life phenomenon (Yin, 2009). This study presented a variety of ethical issues, including risk assessment, confidentiality, informed consent, and access to data (Patton, 2002). The University of Illinois's IRB and the community college's president, in the absence of an IRB, approved this study prior to the beginning of data collection. Potential risks to community college employees and students included psychological stress associated with the potential for internal campus political ramifications. These risks were outweighed by the benefit of understanding how student affairs professionals in a one-stop student services center engage in social learning and their shared understandings about helping students develop college knowledge.

Informed consent was provided to all human subjects, including the vice president of student affairs, community college employees, and community college students who participated in the study. The informed consent process explained the purpose of the study, confidentiality, potential risk, use of data, and voluntary participation. Information also included how to contact the University of Illinois at Urbana-Champaign's IRB Office, the primary investigator who is my dissertation director, and myself. A signed and dated copy was provided to each participant and the original is stored with other
paper documents and notes in a locked cabinet to be retained for three years. Pseudonyms protected individual and institutional identities. The member checking process also gave each interviewee the opportunity to confirm the accuracy of interview transcripts.

Finally, ensuring the privacy of data was an important consideration in the design of this study. Electronic data was maintained on a password protected account on the University of Illinois's secure server through a Campus Information Technologies and Educational Services (CITES) account; paper and tape recorded data such as field notes and interview recordings are stored in a locked file cabinet to be retained for three years.

**Data Collection**

The use of multiple data sources and data triangulation creates the conditions necessary to demonstrate that results are supported by more than one form of evidence (Lincoln & Guba, 1985; Miles & Huberman, 1994; Yin, 2009). In this study, data, collected through documents, observation, and interviews was guided by the research problem and conceptual framework (Merriam, 1998). This section on data collection provides information about the process and relationship the information has to this study's research questions.

**Observation**

During the numerous hours I spent conducting observations, I saw the generalists' engage in social learning activities, including cross-training, and I noted the generalists' interactions with students related to admission, financial aid, course registration, tuition payment, and other college policies or processes that may help develop their college knowledge. I observed the generalists in their natural site, engaging with students and
each other for 83.25 hours over a 4-week period. I deemed this period of time sufficient to see patterns and collect examples related to the generalists' cross-training and other social learning activities, and the generalists' conversations with students.

I had originally planned to observe 50 hours of activities at the one-stop student services center, but during my initial week visiting the college during the end of the spring semester, I observed 50 student visits. Staff members shared that the end of the semester was not typically busy since students were taking finals. With this new understanding, I reflected on whether my observations were representative of the phenomenon that I was studying, and I determined that it was not. To help insure that I had sufficient observational data to represent the phenomenon under investigation, I added additional observational hours.

Also, fifteen of the total 83.25 hours were logged prior to employee interviews to allow me an opportunity to form some of my own impressions at the onset of the study. I wanted this time to formulate my own impressions of the generalists' work with students prior to conducting interviews with employees to reduce the risk an employee might suggest an idea and create bias early in the data collection process. During the spring visit, I observed activities for 38.5 hours during a period of time from the end of the spring semester to the beginning of the summer semester. During the peak registration cycle in mid-July, I observed for another 28.5 hours. Finally, my visit, in the middle of the fall semester, added 16.25 observation hours to my log (see Table 6 for hours per visit).
Table 6

*Number of Observational Hours per Visit*

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Number of Observation Hours</th>
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<tbody>
<tr>
<td>End of April-Early May 2013</td>
<td>38.50</td>
</tr>
<tr>
<td>Mid-July 2013</td>
<td>28.50</td>
</tr>
<tr>
<td>Mid-Fall 2013</td>
<td>16.25</td>
</tr>
<tr>
<td>Total</td>
<td>83.25</td>
</tr>
</tbody>
</table>

Observation allowed me to see patterns related to the information generalists provided to students and to collect examples that demonstrated how information was integrated from the different student services areas to support students’ college knowledge development. My observations included witnessing the types and frequency of student questions, including their problems; and the types and frequency of information provided by the generalists. My observations also incorporated the words and phrases generalists regularly used as they assisted students, two cross-training programs, and day-to-day interactions among employees. My observations were kept in personal field notes.

During my first visit to Midwest, I also recorded the topics the generalists discussed with students in an excel spreadsheet to organize students' concerns along with the information they were presented. Financial assistance information was discussed in 40% of the generalists’ conversational incidents with students. If I eliminated transactional activities such as a simple academic transcript request or tuition payment, financial aid was included in 50% of the conversation incidents. This topic was followed by conversational incidents that focused on prospective student enrollment and course
registration. This analysis of my qualitative notes confirms that the emphasis on financial aid that appears in my findings chapters was due to the students' financial aid concerns rather than my own potential bias as a financial aid expert. Further information is presented as contextual information in chapter 4.

These observations created evidence to consider the generalists' domain of knowledge, explicit and tacit learning through social learning, and their practices with students. This information was especially useful defining the community of practice's domain of knowledge related to supporting students' college knowledge and their practices with students since it was genuine and reflective of actual interactions with students. Also, since shared knowledge in a community of practice is built by interpreting information based on experience, context, and work (Wenger, 1998), observation provided access to some of the generalists’ conversations related to developing shared knowledge such as cross-training and training materials. My observational data helped with understanding if there were positive employee relationships, regular personal interactions, and mutual commitment to support learning and group membership essential to a community of practice (Wenger, McDermott, & Snyder, 2002).

My observation of the generalists in their daily work provided contextual information such as other college employees who may provide information and support, the facilities, the setting, and other work performed that Merriam (1988) claims adds richness to a case study. Observation also supported the development of a positive rapport with the generalists, which is important to qualitative research (Merriam, 1988). During my second visit, it was encouraging to hear one of the generalists say, "We like
when you are here”. I supposed having a researcher interested in their work set them apart from other student affairs employees.

Rapport building happened in a number of different ways, but one that stands out in my memory was my first action on my first day when I assisted the generalists with folding student financial aid letters and placing the letters in window envelopes. While we meticulously folded so each address aligned with each window envelope, the generalists shared information about the day, their duties, and themselves. They seemed to appreciate that I was willing to share in menial work. In subsequent day-to-day interactions, especially while eating lunch, the study participants and other student services employees shared with me some of their personal struggles, as well as negative and positive reflections of the College.

I also tried to be cognizant of how my presence might affect participants when gathering data and considering whether my presence had an effect on the participants’ behavior (Patton, 2002). To the best of my knowledge, my study did not influence the participants in any substantive way, but provided them with a positive perspective on their work and its potential value to students and the institution. The college employees appeared to understand that my role was to research and not to evaluate their work, and this helped to minimize concerns about my presence and to develop a positive rapport.

Employee Interviews

Interviews provide an opportunity to hear "stories, terms, definitions, symbols, agreements, expectations, and commitments" (Wenger, 1998, p.47) to better understand the community of practice and uncover the beliefs and experiences relevant to a larger audience (Patton, 2002). Interviews furnished additional data gathered through
observation and document analysis. Wenger asserts one of the ways a community of practice shares knowledge is through their documentation and record keeping. Understanding the process the community of practice used to construct documents, such as employee manuals and training materials, and improve their practices for students, was gathered through these documents, supplemented with employee interviews. Participants also shared additional information to clarify context important to understanding the case.

Interviews were conducted with the vice president of student affairs, two one-stop student services center supervisors, and four generalists. Multiple interviews over time provided opportunity for participants to share information and researchers to clarify and verify information as time passed (Kvale, 1996). Interviewing as a conversation provides opportunity to build on earlier information and construct knowledge (Kvale, 1996). A total of 14 interviews were conducted over a total of 10.5 hours. The vice president of student affairs participated in a single interview. Three generalists were interviewed three times and a generalist who began work in September was interviewed once. Due to the change in supervisors, the initial supervisor participated in one interview and the succeeding supervisor took part in two interviews.

The first interview gathered background information, including community membership, experiences related to developing students' college knowledge, events related to sharing knowledge among generalists, and artifacts that preserved shared knowledge. Observation hours prior to the first interview helped to establish a connection between the researcher and study participants, and positive relationships assisted participants with feeling comfortable sharing information. The second and third interviews gathered information previously shared to explore feedback more deeply and
ask questions that might have been missed in the first round of interviews, due to time constraints. However, a potential limitation of this study, directly related to the multiple interview process, was the opportunity for participants to reflect on their work, discuss their work with others, and change their work with students or answers in subsequent interviews. Any drastic changes would result in collecting data different from earlier visits and might complicate the interpretation of data. Fortunately, the participants in this study did not appear to change their behavior or answers to questions based on my interactions with their environment.

An interview guide with semi-structured topics assisted me in using my time efficiently and analyzing the data systematically. The interview questions focused on the three components common to a community of practice: the domain or expertise among the generalists; the generalists shared knowledge built through cross training and other learning activities; and the generalists' application of shared knowledge towards supporting the development of students' college knowledge (Wenger, 1998). The interview guide is Appendix E. Interviews were conducted one-on-one, private, and in neutral location, a conference room near the one-stop student services center main desk. Each interview was recorded with minimal notes taken to allow time to attend to non-verbal body language and facial expressions. Immediately following the interview I expanded on field notes. In the evening, I listened to interviews recorded during the day and updated field notes with any reflections of the interview. I also listened to interviews after each site visit to continue reflecting on patterns, words, and inflection. At the conclusion of each visit, a professional transcriptionist created verbatim interview transcripts. Upon receipt from the transcriptionist, I compared the recording to the
transcript and made minor clarifications to ensure accuracy, such as when two people talked at the same time. After this was done, I conducted member checking by emailing the interview transcript to the interviewee to confirm the accuracy of the transcript from their perspective.

**Documents**

When communities of practice create documents, Wenger (1998) asserts they are "giving form to their experiences" (p. 58) and making shared knowledge explicit. Documents express the community's expertise and shared knowledge acquired through cross-training and other social learning activities. Documents such as employee manuals and cross-training materials provided insight into why a student comes to the one-stop student services center for assistance, and they illuminated the college knowledge provided by the generalists. Reviewing documents also provided me with an opportunity to verify data collected through employee interviews and observations (Yin, 2009), and contextual information useful to understanding this case.

Other documents helpful to this study included an organizational chart; generalist job description; organizational goals and reports; institutional data such as number of student visits, admission applicants, enrolled students and financial aid recipients; cross-training agendas, minutes and materials; student brochures; and generalists' personalized notes kept at their workstations to address students' frequently asked questions.

**Researcher Competence**

I have worked in higher education performing work directly related to student services for 28 years. The majority of my work has been related to the administration of student financial assistance. For the last 20 years, I have been employed at a 2-year
public institution. I have also engaged in collaborative work related to implementing a one-stop student services center at two campuses in the last 5 years. In fall 2009, I was appointed to a role with duties that include management of the customer service provided by generalists in the College's one-stop student services center.

In the one-stop student services center where I act as supervisor, the generalists’ duties include supporting a student through the admission, registration, records, and payment processes. To perform these duties, generalists are cross-trained in the areas of admission, financial assistance, registration, records, and payment processes. Generalists' teach students how to use the College's web-based self-service computer system and accept a variety of forms and documents, such as the limited enrollment admission application, financial aid verification information, course registration permits, and graduation petitions. Generalists also make appointments for students to meet with academic and career advisors. Their conversations with students are generally related to college processes and procedures so students can secure courses, obtain financing, and access academic support services.

I believe my community college work experiences in financial aid and one-stop student services are sufficient to understand the work performed by generalists who operate as a community of practice to help community college students develop college knowledge. In fact, it was my supervisory experience with the process of developing a one-stop student services center that inspired me to conduct this study and led me to believe that I would benefit from disciplined inquiry on this subject. I attempted to manage the potential for biased findings by approaching this study from the perspective that I did not know everything about one-stop student services centers. When asked
questions by participants about my institution, I answered honestly but with the caveat that there are differences between institutions in order to remind participants that practices at one institution may not transfer to another institution.

**Data Analysis**

The goal of the data analysis process was to attach meaning to the data collected. Whereas there is continual interpretation in the data collection stage, which is an inductive process, there are few strict rules to qualitative data analysis. I therefore used an established multiphase strategy to provide a sequence to the data analysis process. According to Marshall and Rossman (2006), seven phases structure the data analysis process: "organizing the data; immersion in the data; generating categories and themes; coding the data; offering interpretations through analytical memos; searching for alternative understandings; and writing the report" (p. 156). The institution and each study participant is assigned a pseudonym, and the data are organized by activities, dates, people, and categories. This section describes the data analysis process for each method.

**Observation and Interviews**

Observation data include field notes and personal documents. Observations are classified by whether the generalist was engaged in conversation with a student or another generalist. I created an excel table to organize the data by: date, phase in the academic calendar (start of term, mid-term, end of term), request or inquiry, staff response, additional information, and signed student IRB participant form. I observed the generalists assist 176 students.

Employee interview data include field notes and interview transcriptions. The data are organized in an excel spreadsheet by interview number (1, 2, or 3), employee
pseudonym, the transcribed response, and an organizational code assigned by me to sort responses first by the pre-determined community of practice components. Table 7 provides the coding key. To assign codes, I listened to interviews and read transcripts several times to listen for the college knowledge topics discussed and for the value that this information had to students. I also listened for descriptions of methods used to assist students and methods used to consider improvement to practices with students. I further listened for ways the generalists learned and the value of their cross-training to develop their domain of knowledge and practices to assist students. Also, a contextual category was used to code the generalists’ employment history, education, and job responsibilities. Reflection notes that represent my own interpretation of the phenomenon are kept in a labeled section of the excel spreadsheet.

The data immersion phase helped create an emergent second level of coding that later helped develop major themes and relevant examples. Level two coding helped me to organize data by the college knowledge topic discussed, customer service or interpersonal skill method used to assist students, and the social learning activity that related to developing generalists' domain or improvement to practices with students.
Table 7

*Level One and Two Coding*

<table>
<thead>
<tr>
<th>Level One</th>
<th>Level Two</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CX</td>
<td></td>
<td>Contextual Information</td>
</tr>
<tr>
<td>D</td>
<td></td>
<td>Domain of Knowledge</td>
</tr>
<tr>
<td>CK</td>
<td></td>
<td>College Knowledge Related to Enrollment</td>
</tr>
<tr>
<td>CS</td>
<td></td>
<td>Customer Service/Interpersonal Skills</td>
</tr>
<tr>
<td>L</td>
<td></td>
<td>Social Learning Activities</td>
</tr>
<tr>
<td>DL</td>
<td></td>
<td>Double Looped Learning Related to Practices with Students</td>
</tr>
<tr>
<td>SL</td>
<td></td>
<td>Single Looped Learning Specific to Individual Need/Student Problem</td>
</tr>
<tr>
<td>P</td>
<td></td>
<td>Practices with Students</td>
</tr>
<tr>
<td>CK</td>
<td></td>
<td>College Knowledge Related to Enrollment</td>
</tr>
<tr>
<td>CS</td>
<td></td>
<td>Customer Service/Interpersonal Skills</td>
</tr>
</tbody>
</table>

Observations of the generalists and their interactions with students were categorized by the type of college knowledge provided: admission, financial aid, other, registration, and tuition payment in order to understand the depth and breadth of knowledge demonstrated by generalists in their daily work with students.

The iterative process of coding observational and interview data lead to my development of themes. After my second site visit, I wrote analytical memos for each research question to begin generating themes and to continue reflecting on instances when patterns were not followed and to explore possible alternative explanations.

After each site visit, I also met with my dissertation chair to share my activities, understandings, and open questions. These meetings provided me with an opportunity to
contemplate the data, possible meanings, and subsequent actions, and it provided my chair with an understanding of what I was learning.

After my final site visit, I used analytical memos as a tool for writing the first draft of the themes presented in the findings chapters. Early rewrites of the findings chapters also furnished opportunities for me to continue reflecting on the data and extract an even more nuanced understanding of the phenomenon.

**Document Analysis**

As noted earlier in this chapter, documents included written materials, field notes, and personal documents. Paper documents were filed by the headings: organizational information, institutional data, institutional forms/publications and training materials. Electronic documents were labeled with the same name used at the study site. All or most documents were catalogued in an excel spreadsheet by: document name, source, and topic.

In the data immersion phase, I read all materials several times. Cross-training minutes were summarized to determine permanent and alternating topics. Initial categories drawn from the three components in a community of practice included domain, learning, and practice as well as context and community. Ultimately, the process of organizing and coding led to my confirming the three themes that were apparent in the literature, but did not lead to new themes. The documents also provided further evidence of how the community preserves and creates its knowledge and considers practice improvement.
**Thematic Analysis**

Analytical memos helped me to clarify which activities were occurring most frequently, were unique, and were supported by evidence (Creswell, 2012). The memos provided me with an opportunity to reflect on the themes and the related literature. After these tasks were completed, the results chapters reflecting my interpretation were written. Wolcott (2009) emphasizes the need for a final report to connect with others in the areas of literature, methods, and theory. Wolcott also emphasizes the need to continually review the literature throughout the length of the study; accurately and clearly describing the methods process; and explaining how theory supports the study.

**Trustworthiness**

Credibility, transferability, dependability, and confirmability are qualitative research standards (Lincoln & Guba, 1985; Miles & Huberman, 1994), and I paid close attention to these standards in this research study. I believe credibility was garnered through my description of the research methods, my description of the relationship between the inductive process and the data, and my recognition of the limitations of the study. An extensive amount of time was spent at the case study site observing activities, interviewing generalists and supervisors, and collecting institutional documents in the interest of understanding the phenomenon and situating it within a cultural context. The methods, including member checking, garnered multiple data sources and points of view to help readers evaluate truthfulness.

Readers will determine transferability as they consider the relevance of the results of the research site, context, and findings to their own situations. In addition to findings, this report provides contextual information necessary for readers to understand the
institution, the one-stop student services center, the generalists, the students, and other participants in this case study. The findings are also considered relative to their larger importance to the college knowledge and community of practice literature.

Confirmability is established by the logic and strength of findings (Lincon & Guba, 1985), as well as the ability of another researcher to repeat the study (Miles & Huberman, 1994). To demonstrate the reported findings are consistent with the data, rather than my own personal beliefs, an audit trail was created, including documentation of the data collected and analyzed. Some of the more significant data has also been included in the appendix of this dissertation.

Finally, I advanced the notion of dependability by documenting changes to my research design, due to changing site conditions. The most significant change was the change in one-stop student services center supervisors. Overlap between observations, interviews, and documents also provided triangulation in data sources while multiple site visits created triangulation over time.

**Ethics**

To avoid doing harm and demonstrating respect for others, this researcher showed consideration for other's time, used member checking with each interview transcript, adopted pseudonyms in written reports, maintained information in secure locations, and explained how this research will be useful to others.

At the onset of this study, I was aware that my personal values might be tested if I observed any one-stop student services center staff members providing incorrect or misleading information or treating students disrespectfully. I prepared myself, if faced with the situation, to demonstrate restraint to avoid corrupting data or jeopardizing
relationships with the generalists. There may have been justifiable reasons for
intervening such as an encounter that compromised a students’ physical or emotion well-being, but I did not observe anything of this dire nature. Happily, the staff members
demonstrated kind and generous behavior with students, parents, and other visitors.

Limitations and Delimitations

This study is delimited to a single community college and focuses on the "in-person" service provided to students. Therefore, the research methods allowed this
researcher to be physically present to observe and document generalists' activities with
students at a selected community college one-stop student services center. The case
provided for in-depth study of the professionals’ shared work with each other and their
students; however, the methods omitted telephone and electronic communications, such
as e-mail, so as to avoid overburdening the practitioners or potentially intruding into their
personal lives.

This study was limited to a specific sample in order to examine a community
college one-stop student services center that seeks to support students' development of
college knowledge. The research was limited to current practices and not able to predict
future practices (Merrian, 1988). The results were site specific and not generalizable to
generalists in one-stop student services centers employed at other community colleges.
However, to contextualize the results, I provided nuanced information about the
community college I was studying to help readers understand how the results may apply
to their institution or raise additional questions or issues to be considered in their work.

The study did not include career services information since Midwest Community
College partnered with a state agency, located across the street from the main campus, to
provide career services information. The one-stop student services center did not have written literature to provide students nor were the generalists able to make appointments with the state agency employees.

This study also did not determine whether or not students acquired college knowledge. The study examined the college knowledge generalists offered students.

Additionally, I observed two cross-training sessions, but was unable to observe a third session. I planned to travel on a Thursday and observe cross-training on the first day of my spring visit. Unfortunately there was substantial rain on my travel day that closed local roads and several interstate highways. My employer, Oakton Community College closed for over a week due to the flooding that occurred as a result of this April 2013 storm. Also, during my summer visit, cross-training was cancelled in order to offer an additional hour of services during an increased demand period. Cross-training minutes and interview comments aided in triangulating data and ensuring reliability in my findings.

Finally, I realized that my role implementing a one-stop student services center at Oakton Community College could be a potential limitation since my personal lens might influence gathering and interpreting data or prompt the generalists at Midwest to change their behavior in the middle of the study. To reduce this potential bias, I refrained from discussing Oakton's one-stop student services project or my dissertation project with the student service employees at Midwest. While I disclosed my dual role, I frequently emphasized my role as a graduate student who was on-campus to learn about their work and operation. By attempting to distinguish my professional role from my researcher role I hoped to improve my ability to focus on gathering meaningful and useful data. Also, I
relied on the data I gathered throughout the study to determine findings and confirm reliability.

**Research Methods Summary**

This qualitative single case study examines how generalists in a one-stop student services center operates as a community of practice to build shared knowledge that develops students’ college knowledge. Accepting that there are three complex components to a community of practice -- the domain of knowledge, shared knowledge created through cross-training, and other social earning activities and contributions towards developing students' college knowledge (Wenger, 1998), I determined that a single case would support an in-depth study to answer the overarching research question (Stake, 1995).

This "information rich" case (Patton, 2002, p. 242) involves a one-stop student services center at a Midwest comprehensive community college that includes the generalist position in its staffing model. The generalist duties include providing students with a variety of information and options, including financial aid information since Conley (2007, 2010) and others (CCCSE, 2008; Hagedorn, Perrakis, & Maxwell, 2004; Karp, 2011; Miller, Pope, & Steinmann, 2005; Scott-Clayton, 2011) link financial aid to student success at a community college. The site also supports generalists through cross-training and other social learning activities to examine how generalists create shared knowledge related to helping students develop college knowledge. A combination sampling strategy (Patton, 2002), utilizing critical case sampling and snowball sampling, provided multiple means to secure an appropriate site through formal channels and
informal professional contacts. Final selection of the site included telephone screening and informational site visits.

Informed consent was requested of all community college employees and students who participated in the study in order to explain the purpose of the study, confidentiality, potential risk, use of data, voluntary participation, and provide contact information. A signed and dated copy was provided to each participant and the original is maintained with other paper documents and notes in a locked cabinet for three years. Confidentiality was provided through the use of individual and institutional pseudonyms. Also, employees had the opportunity to review interview transcripts in order to confirm the accuracy of data collected.

Data were collected through observation, interviews, and documents. Over 80 observational hours captured data related to the generalists' engagement in cross-training or other social learning activities related to shared knowledge; and generalists' interactions with students related to admission, financial aid, course registration, tuition payment, and other college policies or processes, which may help develop college knowledge, in order to consider the generalists' application of shared knowledge and their domain of knowledge. Employee interviews provided an opportunity to hear "stories, terms, definitions, symbols, agreements, expectations, and commitments" (Wenger, 1998, p. 47) related to the community of practice's shared knowledge and expertise; activities that build shared knowledge and expertise; and application of shared knowledge to their work. Documents provided information about the cross-training; shared knowledge made explicit in manuals and other reference materials; and additional context useful to understanding the site.
Meaning was attached to the data collected through an inductive, multi-phased, data analysis process. First, data was logged on an excel spreadsheet to create a list of activities, dates, and people. Next, materials were read several times and reflective notes were maintained on an excel spreadsheet to support the creation of initial codes developed from the three components in a community of practice. The iterative process of coding and subcoding lead to the development of themes, then analytical memos were written for each theme in order to continue reflecting on the data, literature, patterns, and exceptions. Ultimately, the final report connected the research project with the literature, methods, and theory.

The study was considered credible through the description of the methods, use of multiple data sources, and member checking of interview transcripts. The inclusion of contextual information helps readers understand how the findings might apply to another institution. The depth and strength of evidence and reported changes in research design, specifically an increase in observation hours due to changing site conditions, contributed to the validity and dependability of findings. Collectively, these methods created a study readers' may consider as trustworthy.
CHAPTER 4

CONTEXTUAL INFORMATION

This chapter provides contextual information useful to understanding this case study of a community college where generalists are employed in a one-stop student services center and responsible for conveying college knowledge to students. According to Bogdan and Biklen (2007), contextual description assists readers to understand the study results. The contextual information includes a description of the community college, the one-stop student center including its origins, and the study participants. The description of participants includes a summary of the day-to-day responsibilities that they perform.

Midwest Community College

This one-stop student services center is located at a medium size community college in a Midwest region of the United States. To protect the privacy of the institution and the study participants, the community college is referred to as Midwest Community College. The 50-year old institution serves a primarily rural district of slightly more than 150,000 residents. Approximately 22% of the College's in-district residents live in a single city of 33,000 residents. Accordingly, the Department of Education's Integrated Postsecondary Educational Data System (IPEDS) classifies this area as rural-fringe due to its location just beyond a tri-county area of more than 4 million people.

Midwest Community College is also about a 1-hour drive from several public 4-year institutions, which might imply the transfer mission of the community college is more prominent than other missions. Local businesses appear to have made great efforts to draw shoppers and diners to the traditional center city through weekly farmer’s
markets, classic car cruise nights, and musical concerts. However, retail growth is most noticeable outside the center of town thanks to several big box retailers and national chain restaurants. For example, a privately owned coffee shop decorated with flyers of local events and burlap bags of coffee beans is located on main street a block from the train station. Magazines and newspapers are kept in the corner for customers to read, local musicians are featured from time to time, and the scent of freshly baked goods fills the air. Starbucks, with its drive-thru option and mass-market appeal is located on the outskirts of town where the newer retailers reside.

Midwest Community College provides learning opportunities at its main campus approximately 5-miles outside the largest town in the district, several smaller satellite campuses scattered through the district, and online. The main campus includes a dozen light buff colored brick buildings for its classrooms, art museum, science labs, library, bookstore, theatre, and offices. The buildings encircle an open grass lawn and form the center of campus. Parking lots surround the primary instructional buildings. Wide cement sidewalks connect travelers from the parking lots to the buildings as well as provide pathways through the open grass lawn. A perimeter road surrounds the center of campus. In a corner of the college property that is outside the parking area but within the perimeter road is on-campus housing for approximately 200 full-time students. Outside the perimeter road, also on college property, is an athletic field house with playing fields for baseball, softball and soccer; a performing arts center; and an early childcare center. Adjacent to the campus is a state employment building. Family farms and a few impressive homes on large lots are nearby.
The college employs nearly 100 full-time faculty, 200 full-time staff and administrators and 400 part-time employees, and the College has partnerships with various organizations and businesses to support education and workforce training. Support of their transfer mission is revealed through an almost 15-year old agreement with a private 4-year institution that permits Midwest Community College students to transfer up to 90 community college hours towards a bachelor's degree. Students who choose this option complete the last 30 hours in courses taught by faculty from the private 4-year institution in classrooms located on the Midwest Community College campus.

The college's fall 2013 enrollment report indicated the full-time enrollment equivalency was approximately 3,400 students, with an overall enrollment of over 5,600 students for the fall 2013 semester. In fall 2013, approximately 40% of students attend full-time and 60% attend part-time; 85% of students are Caucasian/not reported, and 15% are students of color which is representative of the district served. Also, 60% of students are female whereas 40% are male. Roughly 60% of students are 24-years old or under, 10% are between 25 and 29 years old, and 30% are 30 years old or higher. While the institution does not collect college data on first-generation college students, it is likely that the majority of the students who attend Midwest Community College are first-generation college students since, according to 2013 U.S. census data, 18.8% of county residents over the age of 25 have a bachelor's degree or higher, compared to 28% nationally.

Financial support is critical for Midwest Community College students. Nearly 70% of all Midwest students receive some type of financial aid, and a subset of these
students indicate more than 50% are federal Pell Grant recipients. According to the American Association for Community Colleges (2014), 58% of community colleges received some type of financial aid in 2011-2012, so the percentage at Midwest exceeds the national community college norm. This situation may be a result of serving regions with higher rates of poverty than the national or state norm. According to the U.S. Census poverty data, the residents in Midwest Community College district are slightly poorer than all U.S. residents. The 2012 U.S. census poverty data indicated approximately 17% of Midwest residents were considered poor compared to the U.S. rate of 15.9%. Surrounding area residents, who may also attend Midwest Community College, tended to also have higher rates of poverty than the nation. In the county just north of Midwest county, 25% of residents met the poverty definition whereas to the south, 20% met the definition. To the west, 18% were classified as poor. Only the neighboring county to the east had a slightly lower poverty rate, 16%, than Midwest county residents and the national rate. These statistics suggest students attending this community college may struggle paying for college.

Enrollment at Midwest Community College also increased during the 2007-2009 recession. Institutional enrollment data indicates enrollment grew from the mid-2000's through the academic year of 2010-11 when enrollment peaked at just over 11,000 students. This enrollment trend corresponds with Hillman and Orian (2013) who state that community college enrollment tended to increase during this weak economic period in the nation’s history. Following this recessionary period, enrollment declined at Midwest, as it did at many other community colleges (see more discussion below).
Midwest Community College Students

The students who I observed during my visits looked and acted a lot like students I've seen on other community college campuses. They wore jeans and sweatshirts when it was cold, shorts and t-shirts or casual summer dresses or skirts during the summer. Occasionally, students who worked wore a uniform or office attire. Backpacks were filled with books. Whereas I seldom saw students walking and using an electronic device such as an ipad, ipod, or laptop computer, I noticed cell phones provided entertainment when students were waiting for assistance in the one-stop student services center. Traditional-aged students brought a parent or friend when visiting the one-stop student services center whereas adult students tended to bring a child, if anyone. According to one of the generalist professionals who participated in this study, the students "have a lot of things going on in their life beyond school." Rachel described students' concerns related to enrollment and academic success as concerns with academic preparation, finances, family issues, transportation to and from classes, family support, children, and work.

Environmental Factors

Environmental factors that this institution faced in the period of 2012 and 2013 just prior to and during this study included reduced financial strength due to decreasing enrollment and declining state and local funding, increasing employee workload, growing numbers of unprepared students, escalating customer service expectations, changing regulations and compliance responsibilities, and increasing demands for accountability. The institution chose to meet some of the financial challenges in fall 2012 by reducing
departmental budgets by 10%, preventing overtime earnings, reducing some office hours of operation, and intentionally reducing the college workforce.

Budgetary difficulties extended to the one-stop student services center when I gathered data in 2013. A loss of 14 staff positions including 2 part-time positions in the one-stop student services center was a result of cost-cutting actions taken by the institution. At the same time, a Cashier and an IT specialist who supported student services were transferred to the one-stop students center. Continued financial decline in fall 2013 enrollment resulted in additional elimination of 14 additional full-time positions and 3 part-time positions, but the addition of one study participant who was transferred to the one-stop student services center in September 2013.

The institution utilizes quality improvement processes such as the Academic Quality Improvement Program (AQIP) and the Baldrige Performance Excellence Program to assess and to continuously enhance organizational performance. Performance is monitored in the areas of student learning, customers, budget and finance, workforce, leadership, and process effectiveness using a variety of methods such as institutional data, student surveys and employee surveys. Usage data and survey results are compared to institutional goals previously developed as part of the institution's strategic plan. One of the first inroads into increasing quality and institutional effectiveness in the area of customer service resulted in the student services area developing the one-stop student services center.

One-Stop Student Services Center

The College's quality and institutional effectiveness customer team considers student satisfaction a factor influencing student marketing, referrals and enrollment.
According to the Vice President of Student Affairs, multiple measures, including the fall 2011 Noel-Levitz survey, Community College Survey of Student Engagement (CCSSE), and several institution-developed student surveys, showed students (current, non-returning), community members, and foundation donors were not happy. As a direct result of students' dissatisfaction, the institution sought to develop a seamless transition between academic advising, orientation, and a College 101 course that is required for students who place into a developmental English or mathematics course.

By March 2012, the student services departments of academic advising, admission, financial assistance, registration and records had reviewed their student processes with respect to the length of time it takes for students to complete various process related to admission, financial aid, and course registration. The student services team also began conversations about office renovation and provided staff training on core customer needs, including students' frequently asked questions, institutional forms, and online resources. Thus, the one-stop student services center was born in spring 2012, with a mission and vision statement that pledges: "We provide excellent, comprehensive customer service to meet the needs and exceed the expectations of students and families."

**Location**

The one-stop student services center is located within a two-story buff colored brick building with space on the second floor for faculty offices and classrooms. Students enter this building from the interior of campus or from a parking lot. In the closest parking lot on the building's facade, there is a banner promoting the one-stop student services center but no specific directions to show students how to get there. From
the parking lot, there are two doorways to enter the building, but neither doorway clearly leads to the center.

Once in the building, confusion about location of the center continues. There is no directional signage near the entry door to help visitors, and there is no foyer to connect the two outside entries. Despite my considerable experience on college campuses, my first visit left me wondering which hallway or stairway would get me to the one-stop student services center. I thought about exiting and reentering the building from the other entry but I finally noticed an overhead banner, about one-third of the way down the hallway advertising a one-stop student services center. As I approached the banner, an alcove appeared on my left with a doorway into the center. The 1st floor plan is provided as Figure 1.

![Figure 1. Floor Plan-1st Floor](image)

*Figure 1. Note.* From “Midwest Community College Website” n.d. Copyright n.d. by Midwest Community College. Reprinted with permission.
Once in the center, I noticed an entry from the hallway directly opposite where I was standing and deduced that the center is located in the interior of the building between the two parallel hallways. Had I known I could have found the one-stop center from either outside entry, I would have found my initial visit less confusing. However, I wondered if my confusion about how to find the one-stop student services center was a metaphor for how students who seek answers and assurances about how to enroll in college might feel in their first visit to the one-stop student services center.

**Facilities and Furnishings**

The one-stop student services center includes office space for the areas of admission, academic advising, financial aid, registration and records, as well as two conference rooms, executive and senior level student affairs administrator offices, and a kitchen/break room. Just outside the center, around the perimeter of the building, there are offices for academic support (tutoring, disability services, Trio), international students and multicultural programming.

Upon entry to the one-stop student services center, visitors see a circular shaped desk that is about 37 feet wide; it fills about a 12 foot by 12 foot area. Behind the warm medium-wood colored desk is a supporting column, with one side of the column supporting a clock. On the other side of the column is a TV monitor displaying college messages and information. Two 6-foot long counters and under counter cabinets run along side of the supporting column. The cabinets hold various office forms, office supplies, cash and check payments, and several lap top computers for student employees to use during their shift. A combined copier/printer and wire bins for student documents are located on the counter tops.
Surrounding the main desk is approximately 1,500 square feet that comprise a lobby area where students and guests wait to meet with a staff member or participate in a student service activity, such as a campus tour or new student orientation. Furnishings include 11 guest chairs located against a wall near the main desk, 11 tables with chairs scattered throughout to comfortably seat 44 people, and eight public computers and a printer available to students. New student orientation presentations and cross-training programs are also held in this space on Fridays. For the new student orientations, additional chairs are arranged theater style to seat approximately 50 people.

The center is lightly decorated with posters providing motivation and support through images and phrases such as "because you matter" and "education is an investment." A sizeable modern art painting helps to fill the space. Three paint colors (white, brown, and orange) delineate the main desk from the waiting/presentation area and private offices.

At each end of the office space are windows that bring in outside light and create a connection to the larger campus community. During the spring visit, a crabapple tree was in full bloom outside one of the windows. Its pink flowers provided a breathtaking view. Whereas visitors may notice additional private offices beyond the main desk and waiting area, the offices do not have signs. Thus, visitors focus their attention on the main desk for their informational needs.

The main desk has eight work stations. Visitors sign-in on one of two sheets of paper located at one of the work stations. One sign-in sheet is for students who have academic advising appointments, and the other is to meet with a one-stop staff member. The sign-in sheets that I first saw during my spring visit had been replaced by two self-
service kiosks by July. Each of the one-stop staff members and student employees use a work station. Specialists also use work stations on a temporary basis as part of a rotational system, typically utilized during peak registration periods. I was assigned one of the work stations during my site visits and was afforded an outstanding location to observe one-stop staff members in their work.

When a one-stop staff member meets with a visitor, the student and/or guest sits across the desk from the staff member. A wooden partition about two feet high and an inch thick divided the work stations and provided a modicum level of privacy. Each work station is also equipped with a telephone. One-stop staff members use a desktop computer and a laptop computer. Two monitors allow staff members to access the College's web page for general information while simultaneously accessing a student's specific academic and financial records.

**Participants**

The original one-stop main desk staffing model from spring through fall 2012 included one full-time generalist who transferred from the financial aid department, plus two part-time generalists who were new hires and one full-time supervisor who was promoted from the admission department. After the fall 2012 reduction in workforce, the two part-time generalists were laid-off. This happened because the College's employment contract terminated employees based on seniority, and these newer employees were terminated before those who had more years of service. These two part-time employees were replaced by two full-time employees from other departments. As a result, in spring 2013 at the start of my study, I found a one-stop student services team comprised of four full-time employees who were transferred from the departments of
admission, cashiering, financial aid, and information technology (see Table 8 showing participants' demographic, education, and employment data). In May 2013, after my first visit and prior to my second visit, the one-stop services center supervisor, Allen, resigned from his position. His supervisor, Leigh, the assistant to the vice president of student affairs, was placed in charge of supervision of the one-stop student service staff members and agreed to participate in my study. Additionally, in September 2013, after a second round of employee layoffs, one of the one-stop student service staff members, May, transferred out of the center to a technical student services position while another employee, Karen, transferred into the center. May completed a third round interview, and Karen completed a first interview.

Table 8

Participants' Demographic Information

<table>
<thead>
<tr>
<th>Name</th>
<th>Position (Interview Round)</th>
<th>Generalist</th>
<th>Age Range</th>
<th>Student at Midwest</th>
<th>BA</th>
<th>MA</th>
<th>Employee</th>
<th>Dept Prior to Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allen</td>
<td>One-stop supervisor (round 1)</td>
<td>Yes</td>
<td>25-34</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>1 Year</td>
<td>Admission</td>
</tr>
<tr>
<td>Karen</td>
<td>Customer service specialist (round 3)</td>
<td>Yes</td>
<td>45-54</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>28 Years</td>
<td>Theatre</td>
</tr>
<tr>
<td>Leigh</td>
<td>Assistant to the vice president of student affairs and One-stop supervisor (rounds 2 &amp; 3)</td>
<td>No</td>
<td>25-34</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>9 Years</td>
<td>Student Success</td>
</tr>
</tbody>
</table>
### Table 8 (cont.)

<table>
<thead>
<tr>
<th>Name</th>
<th>Position (Interview Round)</th>
<th>Generalist</th>
<th>Age Range</th>
<th>Student at Midwest</th>
<th>BA</th>
<th>MA</th>
<th>Midwest Employee</th>
<th>Dept Prior to Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marie</td>
<td>Customer service specialist (rounds 1, 2 &amp; 3)</td>
<td>Yes</td>
<td>25-34</td>
<td>Currently Enrolled</td>
<td>No</td>
<td>No</td>
<td>2 Years</td>
<td>Financial Aid</td>
</tr>
<tr>
<td>May</td>
<td>Customer service specialist (rounds 1, 2 &amp; 3)</td>
<td>Yes</td>
<td>45-54</td>
<td>Yes</td>
<td>Current</td>
<td>No</td>
<td>24 Years</td>
<td>Information Technology</td>
</tr>
<tr>
<td>Rachel</td>
<td>Student accounts and Customer service specialist (rounds 1, 2 &amp; 3)</td>
<td>Yes</td>
<td>25-34</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>7 Years</td>
<td>Cashiering</td>
</tr>
<tr>
<td>Susan</td>
<td>Vice president of student affairs (round 2)</td>
<td>No</td>
<td>45-54</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>4 Years</td>
<td>NA</td>
</tr>
</tbody>
</table>

### Allen

Allen attended Midwest Community College. As a student, he worked on-campus as a student employee in the facilities/grounds department. He finished his bachelor's degree in criminal justice through the transfer agreement with the private four-year institution offering courses on campus. After completing his bachelor's degree, the admission department hired Allen to assist the athletic department with recruitment of student athletes. After serving in this capacity for about one year, Allen moved into the supervisory position for the one-stop student services center. In June 2013, Allen
voluntarily resigned from Midwest Community College to pursue another employment opportunity outside of higher education.

**Karen**

Karen moved to the one-stop student services center in September 2013 after the College eliminated her job of 28 years in the theatre department. Due to her seniority at the College and the terms of the staff employee contract, she was guaranteed employment but not in the theatre department. Karen told me she chose to work in the center because she did not want to bump any employees into working in the center who would not be happy performing the work. She said she had not previously worked in student services or student affairs but she was only a year or two from retiring, and she thought she could easily adjust for the short term. Karen earned a bachelor's degree in fine arts from Kent State University and a master's of arts from the University of Akron. Her prior position in technical theater work utilized her artistic skills.

**Leigh**

Leigh began working at Midwest Community College as an academic adviser at a satellite campus after earning a bachelor's degree at a public 4-year institution in 2003. After a year, Leigh left Midwest but found her decision to work in the retail industry to be a trying learning experience. She considered herself fortunate to get the opportunity to return to a different student services position at the same Midwest satellite campus. This position allowed her to demonstrate organizational and planning skills related to office operations and to gain experience that she needed to be promoted into an administrative role. After five years, she was promoted to assistant dean of the satellite campus and after one year was promoted again to the director of student success, including TRIO,
tutoring, and disability services at the main campus. During a reorganization, the vice 
president of student affairs promoted Leigh to her current position of assistant to the vice 
president of student affairs where she was responsible for advising, one-stop student 
services, and student success. In addition, Leigh taught a section of college 101, a one-
credit hour course supporting learning strategies, critical thinking, and educational 
planning.

Marie

Marie attended a public four-year institution immediately after high school where 
she had the opportunity to live on campus. After her first year, Marie stopped out of 
college for several years. She resumed her education at Midwest Community College a 
few years prior to my study where she plans to complete her bachelor's degree through 
the transfer agreement with the private four-year institution. After working one year in a 
state agency that assists unemployed community members with their job search and 
retraining needs, including assistance with the federal financial aid, Marie began working 
in the College's financial aid office in a position that was part of the original one-stop 
student services staffing model. Marie's long-term educational and employment goals are 
in the area of social work.

May

May earned an associate's degree from Midwest Community College and has 
completed approximately 25 additional credit hours towards her bachelor's degree. She is 
currently enrolled at the private 4-year institution offering courses on campus. Her first 
position at Midwest was in the registration and records department and focused on the 
implementation of a new student information system. May held several positions in
student affairs, including a position that reported directly to the vice president of student
affairs where she handled student complaints, academic advising, marketing, and various
internal operations. This position required cross training in every area of student services
except financial aid in order to pitch-in during peak registration periods. May's
employment history at Midwest incorporates 10 years of administrative oversight for the
college's academic distance learning program. After this period, the College approved
her request to leave administration but to remain employed as a staff member in the
distance learning program.

Rachel

Rachel attended Midwest Community College and earned her bachelor's degree
by participating in the transfer agreement with the private four-year institution offering
courses on campus. After earning her degree in accounting, Rachel was hired by
Midwest Community College to supervise the cashiering operation that entails accepting
tuition payment, dropping students from courses for non-payment, and collecting unpaid
accounts. The position directly reports to the student affairs division with a strong
secondary reporting line to the Director of Accounting.

Susan

Susan earned a master's degree in social work and a second master's degree in
quality and institutional effectiveness. Her first connection to the college began in 2007
while serving as a chief executive officer for a community mental health organization
that develops mental health resources for college students. Susan’s connection with the
College's president created an opportunity to assist with curriculum development and to
teach a college 101 course as an adjunct professor. After retiring from the community
mental health organization, Susan began working in the College's access center that provides assistance with financial aid forms and college applications. Knowing of her master's degree in quality and institutional effectiveness and work experience, the president asked Susan to serve as an assistant dean in the financial aid department to review and update policy and procedures. After completing the financial aid project in 2011, she was assigned into quality and institutional effectiveness where she led a quality improvement project for student services. In 2012, the president asked Susan to serve in a dual capacity leading quality and institutional effectiveness and student services. In the five positions she has held in four years and the close proximity of her office to the one-stop center’s main desk, Susan gained knowledge of the center and its staff and students. As chief student affairs officer, Susan oversees the areas of academic advising, academic support services/tutoring, admission, athletics, financial aid, one-stop student services, records, registration, residence life, and Trio.

Work Environment

I observed that the day-to-day work climate amongst the one-stop center team seems professional. Team members describe the dress code as business casual, with men wearing slacks (not jeans), shirts, ties, and dress shoes (the suit coat is optional), and women wearing dresses, skirts, and slacks with a jacket or sweater. Each morning the one-stop staff members have a brief conversation about the day's activities to ensure the organization’s operational and employees' personal needs are met. Collectively and without reminders from a supervisor, they ensure adequate staffing, materials, and equipment for their work at the main desk and for incoming groups such as new student orientation.
Personal conversations among the one-stop services team members are minimal but rather focused on work activities, including student needs, except when they choose the music broadcast throughout the center. There tend to be three station choices: classic alternative music playing bands such as Nirvana, Coldplay and Muse; current alternative music sharing music from groups like the Imagine Dragons and Fun; or top 40 mainstream music. When it comes to music, staff members choose based on how they feel that day. They sometimes change the station at the mid-point of the day to create more relaxation or more energy.

The student service offices are open from 8:00 a.m.-6:00 p.m. (M-Th) and 10:00 a.m.-5:00 p.m. (Fr). From Monday through Thursday, the one-stop staff members rotate who starts late at 9:00 a.m., which signals that this person stays until close of business. On Friday, all student services staff arrive at 8:00 a.m. for cross-training, meetings and/or specialized work activities which last until 10 a.m. when the offices open to the public.

**Work Responsibilities**

The one-stop staff members’ primary duties include providing high-level customer service to students, parents, and community members in the areas of admission, cashiering, financial aid, registration, and records. In addition, they connect students to academic advising, new student orientation, and other support services by making appointments and referrals. Figure 2 lists the individuals physically located near the main desk and the departments most directly supported by the generalists. When providing customer service, the generalists respond to questions pertaining to academics, finances, and personal concerns. Everyday activities range from explaining the enrollment process to new students; printing an academic transcript for an alum; connecting individuals to
advisers, personal counselors and other support services; and assisting students upset with
an enrollment process. Each one-stop staff member also assists with training student
employees; mailing financial aid and student account letters; making reminder telephone
calls for orientation and tuition payment due dates; and participating on a student services
continuous improvement team. During my fall visit, the one-stop staff members had
been assigned an additional duty of calling prospective students to remind them to
complete enrollment activities such as placement testing or financial aid processing that
was necessary to enroll in spring 2014 courses. The generalists do not provide academic
or career advising.

Figure 2. Employees Located at One-Stop Main Desk and Nearby Offices

Each staff member also had an individual duty. For example, Rachel, who
transferred from the department of student accounts/cashiering, continued her
responsibilities for student billing, cancellation of student registration if payment was not
secured by required deadlines, and payment collection. She also served on a college-
wide committee that considered changes to college-wide policies. Marie who transferred
from financial aid was responsible for personal/private tuition payments made for
incarcerated students who were eligible for federal financial aid. She also handled
communication with a social service agency whose services included transitioning wards of the court to higher education. In addition, May reviewed and updated student services policies and procedures maintained on a shared drive for all student services employees to access and utilize when assisting students.

**Contextual Information Summary**

This chapter provides details about Midwest Community College to assist readers with understanding the research findings. Approximately 5,600 students attend Midwest. Based on the limited number of adults who reside in the area who have a post-secondary degree, it is likely the majority of Midwest students are first-generation college students. Additionally, over 70% of students receive some type of financial aid to help pay college costs. Students who attend Midwest expressed a variety of concerns about enrolling including financial constraints, family obligations, and work schedules.

The institution has dedicated one-stop student services personnel and resources to provide students comprehensive information about enrollment processes, including financial aid, in a welcoming and professional office environment. The facilities included a main desk to meet with generalists; computers for students to use while applying for admission, securing financial aid, and registering in courses; lecture space for new student orientation and employee cross-training programs; two conference rooms; and private workspace for academic advisers to meet with students and other student services employees to process student data and paperwork. The one-stop student services center comprised much of the first floor in their building, however the floor layout and lack of signage made the center difficult for me to locate on my first visit.
The generalists, Karen, Marie, May, and Rachel, assisted students with a variety of enrollment processes including admission, financial aid, registration, records, tuition payment, and connected students to important services such as new student orientation and academic advising. Prior to becoming generalists, Marie, May, and Rachel attended Midwest Community College as students and worked in other Midwest student services departments. These experiences provided them some degree of understanding about community college student needs. Their enrollment and financial aid knowledge has been expanded through the student services' cross-training program. Each week, all student services employees meet weekly for an hour and receive updates and instruction.

While the institution, as part of a reduction in workforce due to budgetary concerns, slightly changed the personnel who worked in the one-stop student services center during the period of this study. Marie, May and Rachel, generalists, participated in all interview rounds. However, in September, just prior to my last visit, May transferred to Information Technology and Karen, a generalist, transferred to the one-stop student services center. These transfers meant Karen was included during the final observation period and interviews. Additionally, Allan, the one-stop student services center supervisor voluntarily resigned after my first visit and Leigh, the assistant to the vice-president of student affairs, assumed the one-stop student service supervision role and participated in second and third round interviews.
CHAPTER 5

DOMAINS OF KNOWLEDGE

In chapters five, six and seven, I describe how generalists assist students with the processes to enroll in courses, including financial assistance, and how they participate in a weekly cross-training program. The main findings show how generalists' build and convey shared knowledge in order to develop students' college knowledge. These results emerged from qualitative observations of the generalists’ work activities, personal interviews with generalists and supervisors, and institutional documents related to the college and one-stop student services center. My description of the main findings includes the generalists' domains of knowledge, their shared learning experiences, and their contributions to developing students' college knowledge.

Chapter five focuses on the research question: What domains of knowledge do generalists who operate as a community of practice share with one another? According to Wenger, McDermott, and Snyder (2002), members in a community of practice have a shared interest, create shared understandings, and have a universal concern towards developing additional competency and expertise in the domain to improve practice.

I begin this chapter with a short summary of the major findings and a table pertaining to the findings and evidence. Then I present two sections that explain how generalists use their shared knowledge to assist current and prospective students with enrollment processes. These sections illustrate the generalists’ breadth and depth of knowledge concerning enrollment. The phrase enrollment processes refers to student services in the areas of admission, cashiering, financial aid, registration, records and referrals to other student services such as academic advising, tutoring and placement.
testing. Financial aid knowledge is stressed since the majority of Midwest students need financial aid to enroll and the generalists answer most financial aid questions. In my experience, the generalists did not refer financial aid questions to another student services employee like they referred academic planning questions to an academic adviser.

**Domains of Knowledge**

During my observations, I noted the topics generalists included in their conversations with students. During the personal interviews that I conducted with individuals, I inquired as to whether my observations were typical of their work with students. I also considered the topics printed on a handout provided to prospective students (see Appendix F for steps to become a student handout), as well as several recruitment pieces, job descriptions for the generalist positions, and continuous improvement documents. These data convinced me that the generalists are experts in the college's enrollment processes and student satisfaction.

In subsequent text, I present findings pertaining to the domains of knowledge by providing multiple vignettes that reveal the breadth of information that generalists provide prospective students. Vignettes are the primary source of documentation of the generalists' breadth of knowledge since they demonstrate the generalists' knowledge and the application of their knowledge in their work. The context offers insight into the variety and extent of knowledge that the generalists possess.

I primarily used personal interview data to understand how generalists use their depth of knowledge to assist students who are unable to enroll, typically due to a financial or academic matter. The interview data were valuable to understanding the depth of knowledge that generalists displayed in helping students resolve an enrollment
problem. Whereas I principally used observation data to describe the generalists’ breadth of knowledge, asking students to sign a release and consent to the use of observations in the depth of knowledge section would have been insensitive since these instances occurred when students experienced increased anxiety or stress due to holds that prevented course registration.

Table 9 summarizes findings on the domains of knowledge associated with the generalists' community of practice. The chart emphasizes the breadth and depth of the generalists' enrollment processes knowledge described in this chapter.

Table 9

*Organization of Domains of Knowledge Chapter*

<table>
<thead>
<tr>
<th>Theme</th>
<th>Enrollment Processes and Student Satisfaction Knowledge Finding</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breadth of Knowledge</td>
<td>Instruction on processes related to first-time enrollment:</td>
<td>Four observations and one interview</td>
</tr>
<tr>
<td></td>
<td>-ACT scores/Placement test</td>
<td>1) Grace (admission, ACT, new student orientation)</td>
</tr>
<tr>
<td></td>
<td>-Admission</td>
<td>2) Stephanie (tuition costs and financial aid)</td>
</tr>
<tr>
<td></td>
<td>-Financial aid</td>
<td>3) Christina (online/self-service financial aid applications)</td>
</tr>
<tr>
<td></td>
<td>-New student orientation</td>
<td>4) Variety of responses</td>
</tr>
<tr>
<td></td>
<td>-Payment options</td>
<td>5) May (bit of everything)</td>
</tr>
<tr>
<td></td>
<td>-Tuition costs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Online/self-service applications</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Services available to students</td>
<td></td>
</tr>
<tr>
<td>Depth of Knowledge</td>
<td>Interpretation of student records with respect to academic and financial policies that prevent course registration.</td>
<td>Two observations and four interviews</td>
</tr>
<tr>
<td></td>
<td>Explanation of options to resolve situations.</td>
<td>1) Marie (more than a bit of everything)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2) May (deeper level to financial aid)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3) Marie (consistently reviewing academic progress)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4) My observations of generalists demonstrating financial aid knowledge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5) Marie (non-attendance)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6) Bruce (withdrawal)</td>
</tr>
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</table>
Breadth of Knowledge about Enrollment Processes and Student Satisfaction

When the generalists assisted students with enrollment, I observed them providing information on what seemed like an endless set of facts, processes, and policies, as well as assisting them with online self-service applications. The variety of information included the admission application, ACT or SAT scores, English and mathematics placement tests, new student orientation, academic advising process, course registration, tuition costs, payment options and financial aid. According to Susan, the vice-president for student affairs, the generalists are the first employees to greet and meet students and they shape students' initial impressions about the college and enrollment decisions. To report fully on the generalists' breadth of knowledge, I provide three vignettes. Two financial examples follow the first vignette on a prospective student visit.

Prospective Student's Initial Visit

Grace came to the one-Stop Student Services Center with her mother about 9:30 a.m. on a Monday morning in July. When they arrived, one of the generalists in the Center named May quickly greeted them and invited them to have a seat directly across from her workstation. After being seated, May leaned forward, smiled, and asked the prospective student and her mother how she could “help them”. She focused singularly on the pair of visitors, ignoring ordinary distractions such as ringing telephones that could have gotten in the way of a productive meeting. The student, responding to the intimacy May created, softly said that she wanted to know what to do to take classes in the fall. In response, May offered the student a one-page college publication that lists six steps to enroll: (a) complete online admission application; (b) complete FAFSA; (c) submit high school or college academic transcripts; (d) submit ACT/SAT test scores or complete
placement testing, (e) attend new student orientation, and (f) register for courses.

Maintaining eye contact with the student, May explained how the first step, which is to complete the online admission application, is a simple form that can be completed immediately at one of the nearby computers. May asked Grace to complete the application and to let her know when it was completed. Before filling out the form, Grace inquired about whether ACT and Compass tests are the same thing. May asked Grace to share a little more and together they determined that the student needed to send her ACT scores and her high school transcript to the college. May asked if Grace had additional questions, and she asked about the difference between full- and part-time enrollment. May shared that Grace needed to take twelve or more credit hours, typically four to five classes, to be considered a full-time student.

After May thanked Grace for her interest in attending in the fall semester, she and her mother walked over to a nearby computer to begin the admission application. A few minutes later, Grace came back to May with her driver's license to prove that she lived in-district, enabling her to be charged the in-district tuition rate. May made a copy of the license for the school's records and returned the original to Grace. Afterward, the student shared that she and her mother were going to stay and complete the FASFA, thus eliminating the need for May to introduce the importance of applying for financial aid. May reminded Grace that she was present if she had questions on the FAFSA, and she urged her to send her ACT scores and call the office to confirm that her scores arrived next week. She also recommended that Grace schedule her new student orientation session. I watched Grace and her mother sit at one of the computers completing their FASFA from afar. About 30 minutes later, Grace and her mother left without returning
to May with questions. During Grace's initial visit to the one-stop student services center, she was introduced to the college's enrollment processes, completed her admission application, documented residency and began her FAFSA application. She was made aware of the requirement to submit her ACT scores so she could continue to complete the steps required of new students in order to enroll in courses.

In this vignette, May demonstrated a broad range of knowledge about Midwest College. Her assistance to Grace showed her ability to guide the student through processes mentioned in the 6-step admissions flyer, beginning with college admission, to interpreting the meaning and utility of ACT and Compass test scores for English and math course placement, to completion of the FAFSA forms. May’s approach was not heavy-handed but attentive, facilitative, and supportive as she balanced sharing information pertinent to current and future needs and encouraging Grace to use the self-service computers. To me, this observation suggested that May understood that her role was about helping students to navigate an initial visit to the college and gain confidence in their decision to enroll.

**Financing and Financial Aid**

Two observations are presented in this section to provide additional insights into the generalists' domains of knowledge in the one-stop student services center. These financial examples are included since students need an understanding of college costs and financial resources to make enrollment decisions (Conley, 2007, 2008, 2010, 2012). Though indistinguishable from other students in my study, the high correlation between first-generation status and income suggest to me that Midwest college may have a considerable number of incoming first-generation students, given the higher than average
incidence of Pell eligibility of its students (American Association for Community Colleges, 2013). Knowing first-generation students may have less access to financial aid information that is necessary to apply for educational grants or loans (DesJardins, Ahlburg, & McCall, 2006) suggests the generalists’ at Midwest College need to be attentive to this aspect of their students’ backgrounds.

First, a student named Stephanie visited the center, and a vignette about her visit provides insights into how a generalist discusses tuition costs and introduces financial aid relative to enrollment. A second vignette representing the experience of another student named Christina is helpful to understanding the breadth of knowledge that generalists have about financial aid processes relative to college enrollment.

Stephanie came to the one-stop student services center in late spring. Marie, a generalist, greeted Stephanie and invited her to her workstation. When there, Stephanie explained that she had applied for admission and wanted to take classes in the summer term. Stephanie asked Marie if her driver's license demonstrated in-district residency. Stephanie shared that she had moved, but not updated the address on her driver's license. After examining a series of computer screens, Marie clarified that her tuition would be the out-of-district rate or approximately $500 instead of $350 as an in-district student. Marie also shared with Stephanie how she could qualify for the lower tuition rate in the fall semester if she changed the address on her driver's license and brought the updated driver's license back to her.

Next, Marie advised Stephanie to begin the financial aid process in order to introduce another step in the enrollment process. Stephanie replied that she had already completed the FAFSA and signed-up for a new student orientation session. Upon hearing
that Stephanie had already applied for financial aid, Marie began researching Stephanie's financial aid application status in order to provide accurate and precise information. Marie shared that her FAFSA information had not been received at this time and how the College sends a letter informing students of their next steps in the financial aid process when the FAFSA arrives. When Stephanie left the one-stop student service center she had a few more days before the summer term began to decide if she could afford to pay for a summer class or learn if financial aid might prevail. Knowing enrollment in the fall semester would be more affordable also provided Stephanie hope that enrollment would not be delayed beyond the summer term.

Stephanie's visit draws attention to the generalists' knowledge of tuition pricing as was evident when Marie probed into the date the student moved to the district and when she mentioned the documentation necessary to receive the lower tuition rate in the future. This vignette also shows the generalist’s knowledge of the College's financial aid processes, including how the student should get started with applying for a Pell grant. Based on my in-depth knowledge of financial aid, Marie demonstrated a basic knowledge of the FAFSA when she encouraged Stephanie to start the financial aid process and an intermediate level when she researched Stephanie’s FAFSA status. Throughout, Marie kept her guidance on a general level so that the student could understand what she needed to know about the financial aid process. Marie also revealed her sensitivity to affordability when she advised Stephanie that her tuition could be lowered in the fall, making her college enrollment more affordable.

The next vignette demonstrates additional financial aid knowledge that the generalists' possessed to emphasize the scope of information essential to assisting
students. During a visit by a student named Christina, a generalist assisted with the student loan process. Upon entering the one-stop student services center, Christina and her mother immediately sat at one of the nearby computers. Once they had located the federal direct loan webpage and completed the student loan master promissory note, Christina's mother approached the main desk and asked Rachel for help with one of the online federal student loan entrance counseling screens. Christina needed additional assistance with the budgeting tools. Rachel asked a student assistant to help Christina while she continued to answer Christina’s mother’s questions about financial aid processes and policies, including dates and deadlines, book vouchers, and financial aid refunds. Rachel sat near Christina and the student assistant while engaging in a conversation with the parent. Christina also asked about the academic rules related to financial aid and the possibility of enrolling part-time to balance academic success with other responsibilities. Before Rachel left to attend to another student, she asked the student assistant to help Christina accept her student loan in the College's financial aid self-service application.

In this vignette, Rachel ensured that Christina completed all federal and institutional steps for a federal direct student loan and gained information on a variety of financial aid processes such as textbooks purchases, refunds, and obligations to meet academic progress standards. The example provides a rich understanding of the generalists' knowledge about the financial aid processes since it includes student loan processes and demonstrates that the generalists' financial aid knowledge goes beyond the initial FAFSA processes and extends to students' rights and responsibilities. When Rachel detected the importance of financial aid to the family, she introduced students'
obligation to meet academic progress standards and offered more information than sought. Rachel also demonstrated her knowledge of how critical financial aid is to students persistence and completion. This vignette exemplifies one of Rachel's student satisfaction beliefs. In my second interview with Rachel, she shared that offering students more information than requested helps her exceed students' expectations.

**Various Student Questions and Generalists' Answers**

I also observed the three generalists answer an assortment of questions related to student enrollment and college financing. Multiple students sought clarification on their tuition payment plan, their financial aid application, the self-service registration process, and the availability of housing. Additionally, generalists received requests for academic transcripts, academic advising appointments, and assistance with self-service registration and financial aid screens. As these examples occurred with some regularity during my observation periods, the topics appeared to be representative of the range of generalists' knowledge on student enrollment.

In addition, generalists demonstrated their range of knowledge about enrollment processes when I observed them answer unique questions on topics that only occurred once during my observation periods. For example, Alexis, who moved to the area from another state, and her mother asked about course registration since Alexis had met all requirements to graduate from high school except for an English course, and she had scored perfectly in all parts of the SAT exam. In this instance, the generalist, May, explained that Alexis could not be admitted as a regular student since she was not yet 18 years old or a high school graduate. May suggested that Alexis enroll at the local high school, but work with her high school counselor on a process referred to as dual
enrollment or guest high school student. This process would allow her to take Midwest courses while enrolled in high school. During another observation period, a parent stopped by the one-stop student services center with a family educational rights and privacy act (FERPA) release form and asked how he should make inquires in the future. The generalist, Marie, accepted the document and shared that he would contact the one-stop student services center.

Another distinctive example pertained to the course transfer process, associate's degree course requirements, and specific financial aid questions such as how to request a student loan deferment and change the school code on her FAFSA occurred with a student named Lauren. Rachel, a generalist, explained to Lauren how she could update her school code on the FASFA website and obtain a deferment form from her student loan servicer by submitting the deferment form to the one-stop student services center. They also discussed how Midwest publicizes the courses required for graduation so Lauren could better utilize the college catalog and how to arrange an appointment with an academic adviser. Additionally, Rachel shared that the four-year institution she is planning to attend may have information on their website about course transferability, the option to meet with an academic adviser, and the state website that publicizes course transfer information.

Another student named Robert came to the one-stop student services center to ask questions about student loan repayment. May, a generalist, sat with Robert at one of the nearby computers for 20-30 minutes and helped him locate and read different web pages about student loans until he could describe the loan's interest rate, expectation to repay even if he did not graduate, expected monthly payment, and months of repayment. At the
end of the conversation, I overheard Robert share that he still wanted to think about whether to borrow a student loan in the upcoming semester and May invite him to come back if he wanted help on how to accept the loan and complete the online application and loan counseling.

Another example helpful to understanding the generalists' breadth of knowledge was during a visit by a student named Brianna. Brianna sought advice on course prerequisites for the nursing program and summer financial aid processes. Marie, a generalist, shared with Brianna where she could find a list of the course prerequisites in the college catalog. Then they discussed what classes she might take in the summer while Marie reviewed the student's financial aid information. After reviewing the student's financial aid and enrollment history, Marie shared how much Pell Grant was remaining for the summer semester. Marie also encouraged Brianna to arrange an academic advising appointment in order to learn more about the application process for the nursing program.

A student named Marvin sought assistance with coordinating his class schedule around the public transportation schedule. Rachel, a generalist, helped Marvin locate the online bus schedule and online course schedule to help him with his decision-making. While inquiring into his work and family responsibilities, Rachel promoted daytime courses when the bus stopped more frequently at the college.

The preceding examples suggest that, when answering students' questions, the generalists demonstrated their range of knowledge pertaining to enrollment processes. Their extent of knowledge exceeded instruction on the 6 steps to enroll and included less common topics such as limited enrollment programs, Midwest graduation requirements,
transfer processes, student loans and college services. When needed to respond to students' questions, they accessed information from the college catalog, the college website and, related educational websites, or the public transportation schedule. To this point, May, a generalist, provided students with the name of the state's website on course transferability when academic advisers were not immediately available to meet with students. Moreover, instant messaging financial aid advisers and calling the housing office provided generalists easy access to personnel who could assist their students with answers.

The use of additional resources also demonstrated the generalists' commitment to student satisfaction by being accurate in the information conveyed to students. Marie, a generalist, shared in an interview the generalists' philosophy when an employee does not know or cannot locate an answer to a student's question: "Don't guess…get them to the right person". Similarly, May, a generalist, explained when students do not receive sufficient or correct information they may experience difficulties that lead to dissatisfaction with Midwest.

**Breadth of Knowledge Summary:** “We know a little bit of everything..."

In one of my interviews, a generalist named May observed: "We know a little bit of everything...we know enough...to get them [students] on a path." These words resonate with the variety of information I observed generalists regularly share with students. As the generalists discussed the admission process with prospective students, the generalists introduced the college's requirements to enroll and answered an assortment of different questions. The generalists shared facts that would appear to enhance the students' ability to enroll and finance their education. When assisting
students with web processes and online self-service applications, the generalists taught
the students how to complete activities and find answers to their questions.

My analysis of these vignettes, along with a variety of examples of student
questions and generalist responses, showed the breadth of knowledge that the generalists
display in their work with students and parents. The vignettes provided evidence that the
generalists' have a considerable amount of knowledge related to the college application,
registration and financial processes, including financial aid processes. The generalists'
responses to student questions demonstrated that they are knowledgeable about services
and processes and that they use their knowledge to encourage students to enroll and make
informed decisions. Since generalists must know a variety of information to support
prospective students, the phase "a little bit of everything" is a fitting description of the
generalists' breadth of enrollment knowledge

**Depth of Knowledge about Enrollment Processes and Student Satisfaction**

The depth of generalists' knowledge was most apparent within the context of
assisting students who needed to resolve an academic or financial matter to enroll in
courses, especially when the matter involved financial aid. Financial aid was a topic that
the generalists mentioned in interviews as important to know thoroughly. Personal
interview data and observations offer evidence related to the generalists' expertise with
college policies and student persistence.

I begin this section with a generalist's reaction to the phrase "we know a little bit
of everything...". Next, I present results related to my interviews with generalists about
financial aid and my observations of them assisting students with financial aid matters.
Following my discussion of these results, I present results of my interviews with
generalists regarding their knowledge about attendance rules. I conclude with a vignette of a generalist's conversation with a student about withdrawing from the institution. The academic and financial topics presented in this section are examples of college policies that affect student enrollment and the comprehensive knowledge generalists' use when assisting students.

"...More than just a little bit about everything."

Whereas May's words, "We know a little bit of everything..." helped to describe the breadth of the generalists' domain of knowledge about enrollment processes, Marie, another generalist who worked in her position nearly two years, accentuated the depth of the domain of knowledge about enrollment. During my third interview with Marie, I asked if she agreed that the phrase "We know a little bit of everything..." accurately described the generalists' domain of knowledge about enrollment?. Marie responded affirmatively but qualified her response, "I think that as time goes on and the longer I work up there [the main desk], I know probably more than just a little bit about everything."

Marie shared how her work in the financial aid office prior to being a generalist was an advantage to being knowledgeable about financial aid topics. Similarly, Rachel was already an expert in cashiering prior to becoming a generalist and had occasionally assisted the financial aid office in the past with various projects. She also explained that, as time passed, she learned more about registration, records and cashiering since the repetitive nature of students' questions aids in building one's knowledge. As generalists' knowledge grew, Marie shared that their responsibilities had increased. Marie provided three examples of how the generalists’ knowledge and responsibilities increased since the
creation of the one-stop student services center. They were entering course registration override codes for course registration, printing academic transcripts, and updating students' records for change of name and address.

Marie's account of the generalists' expertise considered their prior work history and experience in the generalist position. Her employment in the financial aid office, Rachel's in cashiering, and May's in student services and IT provided them a background to easily integrate other college policies and processes into their domain of knowledge. Additionally, interactions with students helped the generalists to better understand students' needs. Marie also indicated that other supervisors acknowledged the generalists' increasing capabilities by asking them to perform sensitive duties including making changes to a student's academic record and furnishing student academic records.

**Financial Aid: Academic Progress**

In my interviews, the generalists' stressed the importance of financial aid knowledge. For example, May commented on students' feelings about financing their college education and about the complex academic rules a generalist must know to assist students who receive financial aid. She stated:

[T]he financial aid piece is crucial. The more information we can get about that it just makes...I mean money makes the students happier. Unfortunately, it also brings the beast out in them. So if we don’t know the answers, we don’t give them answers, we don’t give them consistent answers, they just walk away mad and...not happy with us. It’s hard because...there’s different levels of knowledge about going through the processes. I mean there’s the basic admissions, financial aid. But then when – when stuff gets complicated ...they had issues with financial
aid, they’re at credit limit, they – they’re on suspension. Then, there’s this next layer of understanding that’s very deep. The appeal process, how to get through the system...when’s the perfect time to drop a class so you’re not paying. Helping them understand the return to Title IV funds. It gets complex as you go higher.

Expressing similar concerns, Marie spoke about the importance of financial aid for the students. She stated, "I, one thing that I always, always look at is their SAP [financial aid standards of academic progress] status." Marie stressed that she always reviewed their SAP status no matter how a student inquires about enrollment since most students pay tuition through financial aid. By reviewing their SAP status, Marie shared how she has a conversation with the student about financing and financial aid before the student spends time with an academic adviser and registers for courses. By first discussing financial matters, Marie ensured the student did not expend time or energy on enrollment activities until the student learned how his or her prior academic performance and academic standing affected financial aid availability. In my observation periods, I heard Marie explain to a student who was interested in returning to Midwest that the student's academic standing prevented receipt of financial aid before she inquired further into the student's situation, interest in enrollment, and a meeting with an academic adviser.

May and Marie pointed to academic progress as a critical college policy when assisting students who receive financial aid. May's quote, at the top of this section, indicated there are several complex pieces to the academic requirements for financial aid students--credit limit, appeal process, and return of Title IV funds--and that the essential knowledge goes beyond helping a student complete the FAFSA. When Marie stated that
she reviews a student's academic standing in each meeting with a student, she stressed the impact financial matters have on a student's enrollment decisions and observation that financial aid is strongly linked to access to higher education. Also, May recognized that the loss of financial aid and its influence on enrollment may anger a student to the point that he or she might behave rudely or gruff when she stated "…it also brings the beast out in them".

My observations of the generalists also included conversations with the students about financial aid academic rules and procedures. For example, I observed several conversations where generalists explained to the student how he or she did not meet the academic requirements for financial aid. The generalists were knowledgeable of the different pieces of the academic requirements for financial aid, including the minimum grade point average, credit hour completion rates and credit hour limits associated with financial aid. They also identified to students, who believed there were mitigating circumstances that might justify an exception, the steps to appeal the loss of financial aid. I also observed the generalists creating and mailing bills to financial aid students who had withdrawn from courses and lost a portion of their financial aid in accordance with a federal policy called Return of Title IV funds. I was especially impressed that the generalists were familiar with the Return of Title funds regulation since I, in my capacity as a student financial aid administrator, consider it one of the most difficult regulations to grasp.

My observations confirm the information May and Marie presented in their interviews about being knowledgeable of financial aid academic policies. They asked clarifying questions and handled conversations with tact and sensitivity when students
did not meet academic requirements to obtain financial aid. I did not observe any students act rudely when faced with the news that financial aid was not available, and I observed only one instance when a student demanded to speak with the Financial Aid Director about her situation. The ability of the generalists to communicate disappointing news and discern which piece of information within the academic rules precluded the student from being eligible for financial aid demonstrated to me that the generalists had a considerable amount of knowledge about financial aid.

**Obscure Practices: Attendance**

Midwest Community College does not have an official attendance policy in their college catalog. However, the institution has processes in place to determine whether or not students are attending class and attendance rules are embedded in policies established at the departmental level. In an interview with Marie, she explained that Midwest allows students to officially drop and withdraw from courses and faculty to report students as non-attending when they do not attend class. She also shared that students have questions about attendance since non-attendance is treated similarly to an official withdraw, potentially affecting tuition and fee refunds, financial aid, and campus housing. Marie described how she always received a few telephone calls from students during the second week of the semester asking "why can't I live in student housing?" While bringing up the student's record, she asked if he or she attended classes the first week of the semester. Marie stated that most students responded by indicating that "I didn't attend classes" and offered a reason such as an emergency, plans to change sections, or lack of enthusiasm about attending class the first week of the semester. After hearing students' responses and confirming that faculty report non-attendance during the
first week of the term, Marie explained to me how she tells students about the College's expectations to attend classes, including the necessity to attend classes in order to live in on-campus housing. She also explained the process to re-enroll in courses and the procedure to reestablish on-campus housing eligibility. Since the faculty at Midwest report non-attendance to the registrar three times in a semester, there are several times in a term that generalists may need to assist students with understanding how non-attendance results in a problem with retention and what their options are to resolve their situation.

Marie's description of how generalists help students who have been reported by faculty members as non-attending indicates an understanding of hidden College practices and their affect on students since the College embeds attendance rules in policies established at the departmental level. Embedding the information within each department's policies requires the generalists to understand the multiple ways non-attendance may pose problems for students and how students can resolve their situations. Marie provided a housing example in my interview of her. Another example of how students resolve non-attendance appeared in documents that I reviewed from the financial aid department. Midwest has a form for students to verify attendance by obtaining their faculty member’s signature to undue the loss of financial aid that resulted from non-attendance.

My interviews with the generalists about their understanding of non-attendance and their affect on students indicates they recognize that the College does not always present clear information and expectations to students. This example of non-attendance also points to the responsibility generalists place on themselves to help students resolve
situations. In the housing example Marie provided, the student sought help from the one-stop student service center rather than from the Housing Department. Marie did not refer the student back to the Housing Department, but took the time to explain the process and educate the student on the College's expectations to attend classes and how to obtain permission from the faculty member to be reinstated in each class. Marie's story provides an example of how generalists help students understand the policy and offer instruction on how to ameliorate the situation.

**Decision-Making: Withdrawals**

Another area where I saw students need comprehensive support pertained to withdrawals. During my October visit, near the mid-term of the semester, I observed a conversation between Rachel, a generalist, and a student named Bruce who wanted to withdraw from his two courses. In providing assistance, Rachel delicately asked Bruce why he wanted to withdraw. Bruce explained that he was not completing homework assignments because he had to work to which Rachel inquired into whether or not he had considered any online courses that might offer more options related to homework deadlines. Rachel explained to Bruce that he could switch into a late-starting section at no additional cost, and she asked if he had financial aid. "Yes, I have financial aid," Bruce replied. Knowing this, Rachel reviewed the fall course schedule to determine if there were late-starting online courses. She found a late-starting psychology course that would require faculty permission to enroll, but she was unable to find a late-starting option for Bruce's second course, thus she presented him with the College's withdrawal form. This form includes several statements of understanding and is included as Appendix G.
Rachel also explained to Bruce how he could enroll again in the course if he had to drop, but just once more since financial aid regulations limit the number of times a student can retake the same course. Additionally, she informed Bruce on how it was necessary to pass his psychology course to avoid having to repay a portion of his financial aid due to the Return of Title IV funds regulations and retain financial aid eligibility in the future due to academic requirements, including the minimum GPA and minimum credit hour completion rate. At that point, Bruce completed the withdrawal form, and Rachel processed his withdrawal. At the conclusion of their conversation Rachel asked Bruce to follow up with her in a week about the psychology course option since there were only a few more days to officially withdraw from a fall semester course.

This observation demonstrates the generalist's understanding of how the student's withdrawal relates to academic and financial aid policies. After listening to the student's concerns about academic success due to limits on his time, Rachel provided an option to complete one course. She encouraged him to remain committed to his academic goal by taking one course and acknowledged his need to work and earn money. Rachel also unbundled the different pieces of the financial aid academic rules so that the student understood how his decision to withdraw also affected whether or not financial aid needed to be repaid, limited future payment for the same course, and perhaps limited all financial aid in the future. The example indicates that the generalists understood the challenges students face and realized that they have an opportunity to offer compassion, reassurance, and practical suggestions that give students the opportunity to make decisions that fulfill their academic and financial aid requirements.
Depth of Knowledge Summary: "...More than just a little bit about everything."

The three vignettes presented in this section demonstrate that generalists acquire additional knowledge about College processes in order to help students resolve dilemmas that interfere with their ability to attend Midwest Community College. Additional understandings about financial aid, especially academic progress, make it possible for generalists to help students understand whether or not financial aid is an option. Generalists also increase the students’ knowledge about unclear College policies and processes when they explain the unintended consequences of an action, such as non-attendance or course withdrawal, on matters such as housing and financial aid. As the generalists assist students, they may ask clarifying questions to fully understand their situation and unique needs. Generalists review students' academic and financial records in order to provide precise and accurate information and deliver the information within the context of the students' situation. Additionally, generalists employ their depth of knowledge to deliver more information than originally requested and to provide students enrollment options. Case in point, when Rachel presented Bruce the option to enroll in an online course, she provided him with an alternative that he had not considered previously.

Domains of Knowledge Summary

Observational and interview data indicate that the generalists are experts on the college's enrollment processes and student satisfaction. Their breadth of knowledge offers prospective students guidance on the steps to enroll at Midwest Community College and encouragement to apply, complete placement testing requirements, attend new student orientation, apply for financial aid, register for courses, and arrange for a
tuition payment plan. According to May, a generalist, "We know a little bit about everything."

Generalists use their depth of knowledge to assist students with situations that prevent enrollment. They are aware of how the college's academic and financial policies and practices connect to course registration, housing, and financial aid, even when a relationship is not apparent to students. Due to their appreciation of the positive benefit financial aid has on enrollment, the generalists also acknowledge that financial aid rules are complex but necessary to know to meet students' needs. Marie, a generalist, described her domain of knowledge as "...more than just a little bit of everything". Table 10 describes the generalists' domain of knowledge.

Table 10

*Generalists' Domains of Knowledge*

<table>
<thead>
<tr>
<th>Breadth of Knowledge</th>
<th>Depth of Knowledge</th>
<th>Student Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admission Application</td>
<td>Academic and Financial Policies and Practices</td>
<td>Encouragement</td>
</tr>
<tr>
<td>Placement Testing Documents</td>
<td>Financial Aid</td>
<td>Sensitivity and Tact</td>
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<tr>
<td></td>
<td>- Academic Progress</td>
<td></td>
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<td></td>
<td>- Return of Title IV</td>
<td></td>
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<tr>
<td></td>
<td>- Relationship to Higher Education Access</td>
<td></td>
</tr>
<tr>
<td>New Student Orientation</td>
<td>Attendance</td>
<td>Clarifying Students' Questions</td>
</tr>
<tr>
<td>Course Registration and Midwest Self-Service System</td>
<td>Withdrawals</td>
<td>Presenting Additional Information than Requested</td>
</tr>
<tr>
<td>Residency and Tuition Costs</td>
<td></td>
<td>Providing Accurate Information</td>
</tr>
<tr>
<td>Tuition Due Dates and Payment Plans</td>
<td></td>
<td>Assisting with Self-Service and Internet Applications</td>
</tr>
</tbody>
</table>
The generalists provide students with a knowledgeable authority who can offer wisdom related to enrolling and financing their Midwest education. The generalists' knowledge makes it possible for students to have their enrollment questions answered by a single person and to receive assistance with enrollment activities. When students seek information outside the generalists' expertise, such as academic advising, the generalists schedule an appointment for the student. Their breadth and depth of knowledge allows the generalists to offer students accurate information that includes context, clarity, and encouragement.
CHAPTER 6
SOCIAL LEARNING OPPORTUNITIES

This chapter explains the generalists' social learning opportunities and answers the second research question: how do generalists who operate as a community of practice learn together through cross-training and other social learning activities. According to Wenger (1998) and Wenger, McDermott, and Snyder (2002), a community of practice participates in reoccurring activities that deepen their domain of knowledge and contribution towards practice. To answer this research question, I observed generalists’ regular interactions with one another, with their supervisors, and with other student service employees. I also considered how the generalists built their knowledge of college enrollment, and they intensified their shared interest in student satisfaction.

To address these concerns, I gathered data by asking the generalists questions about their training and learning experiences. I also analyzed institutional documents, especially related to cross-training activities, that provided awareness about cross-training topics. I used observation to discern what appeared to me to be tacit learning on the generalists’ communication with students. The data that I gathered demonstrated to me that the generalists primarily built their domain of knowledge through informal discussion with various colleagues and through learning at the formal weekly cross-training program.

This chapter includes information about formal and informal social learning experiences of the generalists, beginning with informal social learning experiences. First, interview comments and observations are provided to demonstrate the values and beliefs supervisors incorporated in their communication with generalists. Next, I describe the
types of knowledge generalists teach with one another. I also use my observations to consider concepts related to communications that generalists tacitly share with one another. I conclude this section with the generalists' interview comments that describe how other student services employees help them increase their depth of knowledge.

In this chapter, I then explain the formal social learning that occurs in the cross-training program. Observations, interviews, and institutional documents are used to describe the format of the cross-training program and its relevance to increasing knowledge of enrollment processes and student satisfaction. In an interview with the vice-president of student affairs, Susan, she shared results from an internal survey that indicated to me the positive affect cross-training has had on all student services employees. Finally, cross-training documents, stored on a shared computer drive for all student service employees, demonstrated the one-stop student service center staff document knowledge for future reference. Table 11 maps the organization of the social learning activities chapter.

Table 11

*Organization of Social Learning Opportunities Chapter*

<table>
<thead>
<tr>
<th>Theme</th>
<th>Social Learning Finding</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal Social Learning</td>
<td>Supervisors demonstrate the importance of assisting students.</td>
<td>Two interviews and one observation: 1) May (Supervisor models caring activities)  2) Susan (Leaders convey values and provide models for others) 3) Supervisors rotate into and visit main desk.</td>
</tr>
</tbody>
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Table 11 (cont.)

<table>
<thead>
<tr>
<th>Theme</th>
<th>Social Learning Finding</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generalists share expertise</td>
<td>Generalists share expertise pertaining to enrollment policies, processes, and practices.</td>
<td>Six interviews and one observation 1-4) Marie, May, Rachel and Karen (Colleagues provided teaching through hands-on experiences) 5) Leigh (Value of their prior work experiences) 6) Observation of May and Rachel interactions pertaining to a student's bill 7) May (Informal learning difficulties)</td>
</tr>
<tr>
<td>tacitly share understandings</td>
<td>Generalists tacitly share understandings about communicating with students.</td>
<td>Observations: 1) welcoming 2) encouraging self-service 3) non-verbal communication.</td>
</tr>
<tr>
<td>about communicating with</td>
<td>Other student service employees increase depth of knowledge about a particular enrollment topic.</td>
<td>Three interviews 1) Marie (student's ask why) 2) May and Rachel (other student service employees (specialists) increase their knowledge</td>
</tr>
<tr>
<td>students.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal Social Learning</td>
<td>The cross-training program includes leadership and enrollment updates and opportunities to increase enrollment expertise and build community.</td>
<td>Four interviews, two observations and documents 1) Leigh (Planning provided by interdepartmental team) 2) Minutes and Leigh-permanent topics 3) Observation of enrollment update Leigh-TTRC leadership 4) Minutes and Leigh-rotating topics 5) Observation of financial aid training 6) Susan-training can lead to team building</td>
</tr>
<tr>
<td>Employees' value</td>
<td></td>
<td>Documents-employee survey results</td>
</tr>
<tr>
<td>cross-training</td>
<td></td>
<td></td>
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<tr>
<td>Stored materials preserve</td>
<td></td>
<td>Documents-electronic and publicly displayed</td>
</tr>
<tr>
<td>knowledge for future.</td>
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</table>

**Informal Social Learning Opportunities**

Informal social learning activities are one of the ways generalists build their domain of knowledge about enrollment processes and student satisfaction. According to
the generalists, supervisors communicate their appreciation for students, the importance of spending time with students, and their techniques to assist students. In interviews, the generalists shared how other generalists provided insight and instruction on enrollment processes. Their descriptions reminded me of the phrase "tricks of the trade." Also in interviews with the generalists, when I inquired about learning through observation of other generalists, none of the generalists expressed a type of knowledge acquired through observation of other generalists. I recognized the inability to identify knowledge did not mean that they were not learning, since by definition, one is unaware of tacit learning. Because the generalists did not identify learning through observation of each other, I relied on my observations of the generalists communicating with students to consider the tacit learning they may have gained while observing one another assisting students. I consider how the generalists welcome students, encourage students to use self-service and their non-verbal communication. After presenting these findings, I describe teaching provided by other student services colleagues that the generalists described in interviews as significant to increasing their knowledge of enrollment processes. The generalists learned the rationale for particular college enrollment policies, regulations, or processes and used the knowledge to include context in discussions with students.

**Role of Supervisors in Informal Learning**

In my interviews, the generalists explained how current and former supervisors clarified through their words and actions the importance of students' enrollment and their satisfaction. For example, May, a generalist, recalled how her mentor taught her: "Students are the reason why we were here". May shared observations of her supervisor, who she considered a mentor, as someone who taught her about caring for students,
including understanding students' feelings, having patience, being accepting, going beyond minimal duties or expectations, making a connection, and smiling to warmly greet students. May's observations of and her conversations with her former supervisor conveyed expertise related to communication with students and student satisfaction. This informal teaching process was persuasive due to May's observations of consistency between the former supervisor's words and behavior with students. May's description of her former supervisor and mentor was also consistent with Rachel and Marie who shared how their first supervisor emphasized the importance of assisting students by taking time to answer their questions and also modeling this behavior. They considered their observations influential on how they approach and value their work with students.

In my interview with Susan, the vice-president for student affairs who initiated implementation of the one-stop student service center, she revealed ways that she emphasized the value of students. She described modeling behavior for others to observe, setting high expectations of others, and providing all student services employees with cross-training necessary to assist students at the one-stop student service center. She stated:

So, if we need help on the phones, I’m on the phones. If I see that we’ve got a lot of people waiting out there [for assistance at the One-Stop Student Service Center main desk], I will go out and grab somebody and bring [the person] in [my office]. ...I expect everybody to do the same thing. ...And what I did here was, I said, I don’t care if you work in housing. Get over here! I don’t care if you’re from the athletic department. Get over here! We’re going to train you and you’re going to be here helping people. But I think the most important thing is, I expect
all administrators to do real work of the department, not just lead. I think you lead by example and you lead by, you lead by, service to your team.

Due to the location of the Susan's office near the one-stop student services center main desk, I observed her welcome students sitting in visitor chairs near her office door, help answer students’ telephone calls during high demand periods, and ask how many people were waiting for assistance. Similar to the generalists' description of influential past supervisors, Susan emphasized through words and actions the importance of students and students' satisfaction. Her expectations and modeling may have influenced other student service administrators since I also observed the assistant to the vice-president who supervises the generalists, registrar, director of financial aid, director of student success, and director of athletics take shifts to assist students with activities performed at the one-stop student services center main desk or the self-service computers.

Supervisors, past and current, had an important role teaching generalists to value engagement with students. Observation of supervisors spending time with students demonstrated the activity was important and valuable. According to May, observation also informed her communication methods with students. Susan, the vice-president for student affairs, understood the influence supervisors have on the generalists and used the belief to emphasizes the importance of students and student satisfaction.

**Role of Generalists in Informal Learning**

Generalists shared in interviews that when they began their positions there was a brief initial training period that included job shadowing, coaching, peer feedback, and written materials; however, they relied on asking questions of colleagues while assisting students to build their knowledge of the college's enrollment processes and policies.
Daily interactions appeared to be a meaningful way to learn. Whereas generalists did not identify any knowledge gained directly from their observations of each other although tacit knowledge about communicating with students may have been shared.

**Enrollment Expertise**

In interviews, the generalists shared that they primarily learned about enrollment processes and policies through informal social learning opportunities. Marie, a generalist when the one-stop student services center opened, shared her memories of her initial training experiences:

> We were taught, by colleagues, [students’] frequently asked questions, computer screens, web pages, processes. Trial and error were the initial ways when we started. At that time, we had to have a financial aid adviser at the desk all the time [who helped with answering financial aid questions]. I also learned a lot from the student employees and from being a student at the College. I knew where I could find answers as a student.

Similarly, May and Rachel, who began after Marie, initially received a week or two of reading, job shadowing, and coaching. Through asking questions while assisting students provided more opportunity to learn and immediately apply the knowledge to a particular situation and within a context. Rachel shared how she immediately stopped to ask a question if she had any hesitation when initially assisting students. The repetition of the work and colleagues' support during the learning process was mentioned by Rachel as important to recall and communication of enrollment processes.

Karen, a generalist, was only a few weeks into her position during my final visit. She explained that she was very nervous about learning the breadth of material required
to assist students. I empathized how difficult this transition might be since Karen transferred to the one-stop student services center after her position in the theatre department, where she had worked for 28 years, was eliminated. I imagined how sad I would feel at the loss of my old position and how anxious I would feel learning something completely new. Karen said part of her initial training included job shadowing, however she found job shadowing difficult because she could not see what computer screens were reviewed or for what purpose due to her distance from the computer screen. To increase opportunities to learn, Karen decided it was time to begin assisting students since "that was the only way that I was really going to learn it." By attempting to help students before feeling confident, Karen's learning experience was similar to the other generalists. She said that when she tried to help students she relied on her colleagues to answer her questions. She also shared that "most of the stuff that I’ve been learning has been on the job and it’s been from the other two people [the generalists Marie and Rachel]." During observation, I also noticed that Marie and Rachel sometimes paused in their work when Karen assisted students to see if she needed help locating a computer screen or might have a question about a process or policy. Karen's experience helps us appreciate the generalists' tenacity to gain new knowledge and the support generalists offer newcomers. To ensure learning, Karen asked questions and seasoned generalists responded. The seasoned generalists also observed the newcomer's work, and offered additional insights.

Leigh, the current supervisor, observed how the generalists' prior positions at the College brought different knowledge to the team and made the team stronger as they
shared expertise with one another. According to Rachel, one of the generalists usually knew the answer to a question. In her second interview, Rachel said:

We, if we’re not confident in an answer, we will bounce questions off each other, regularly. We’re double checking...with one of us....we have somebody usually right there to ask and say, hey is this right, hey did I do this right? Because we all have different expertise that we draw on together.

An example of how the generalists’ utilize one another's expertise occurred during my summer visit. I observed May and Rachel discussing a student's tuition bill. May reached out to Rachel who previously supervised the cashiering operations. First, they confirmed the balance due and financial aid received. Second, they reviewed the student's academic transcript, which prompted them to ask the student about whether or not she had attended the entire term or moved out of the residence hall. The student shared that she had moved back home and stopped attending classes. With this additional information May and Rachel deduced there were two outstanding charges. One charge, a result of a punitive financial aid policy due to the unofficial withdrawal, was repayment of a portion of the student's financial aid. The second charge was due to her on-campus housing contract. May and Rachel shared with me that it was common to ask one another for assistance and utilize each others’ expertise in this way.

The generalists also shared that informal learning can occasionally be problematic. When May began her position in the one-stop student services center, she found the lack of written documentation and use of different computer screens to complete an activity an obstacle to learning. Consequently, May began writing documentation and, since the one-stop student services center was less than a year old
when May joined the team, her written records helped to create an initial training manual for future employees, and a resource for other student service employees who rotated to work at the main desk. Leigh, the current supervisor, recalled:

There was…a time where May had asked me about something, and I just didn’t have an answer for her, and so it wasn’t too long after that she had got somebody else, found the answer, sent it out and said, you know here is the procedure for that.

Whereas informal social learning may pose some challenges, the generalists relied on it heavily. All the generalists shared in interviews that daily interactions were important to learning enrollment processes, and I observed the generalists use their interactions with one another to learn or recall a process or policy. This community of generalists understood mastery of the enrollment processes and polices was necessary to be successful in their work. So, when a new employee is hired, such as in the case with Karen, they paid a little more attention to the information the new employee shared with students in case the new employee needed help. Asking questions of one another while assisting students, also allowed the generalists to collectively solve complex questions. By applying their learning to a new context, the exchange of information created meaningful learning experiences.

**Communication Expertise**

My observations of the generalists suggested they tacitly shared knowledge about how to communicate with students despite the generalists' denials, in interviews, of gaining any knowledge directly through observations of one another. Two points led me to consider the sharing of tacit knowledge related to communications with students.
First, the generalists reported a minimal amount of formal training related to customer service or communication. In interviews, the generalists shared that they either had not participated in any off-campus professional communication training. Rachel and Marie also recalled only one or two cross-training activities specific to communication. I later confirmed the limited number of offerings with Leigh, the supervisor, when we discussed a cross-training handout titled *Digging Deeper*. Secondly, since the generalists' acknowledged to me that supervisors modeled desirable communication expertise when interacting with students and the generalists were provided minimal formal learning opportunities related to communication and customer service, the generalists likely have tacitly shared communication knowledge with one another.

Without formal communication training or a recognized system, the generalists were left on their own to determine the communication techniques they would use with students. From my observations, the generalists communicated tacitly with one another several beliefs about how to communicate with students. After just a few days of observation of the generalists, some patterns emerged about their communication with students including the way to greet students, encourage students to utilize self-service, and enhance their interactions with students through body language. The generalists' actions demonstrated the behavior accepted within their community.

Looking first at greeting students, there was a regular routine to greeting students at the one-stop student services center. First, the generalist at the main desk stood so she could be seen by others. Then, she called the first name of the student who was next on the waitlist to meet with a generalists. Since other students may be nearby in visitor chairs or at a self-service computer, limiting the generalist to use of students' first name
provided students a minimum of amount of privacy in a public area. Upon hearing his or her name called, the student approached the generalist. The generalist welcomed the visitor with a "hi, hello, or hey" quickly followed by "how can I help you today?" Since the generalists wore nametags, they typically dispensed with introducing themselves to the visitors. While looking directly at the visitor, the generalist invited the visitor to their workstation and offered him or her to have a seat across from her. In my observation, these exchanges seemed to be courteous toward the student and also an efficient means to invite the student into a conversation. One might make students feel more welcome by walking over to the visitor chairs to call the student's first name a little more quietly, escort the student to her workstation, and inquire into the student's day.

Frequently, the generalists referred students to use the self-service enrollment options at nearly computers, and they consistently encouraged them to complete online tasks. I noticed how the generalists' chose positive words to spark students' confidence. They regularly use phrases such as "you can, your options are, let me show you how, and I can help you with that." Whether the generalists boosted students' self-confidence or learning remains unknown, but through positive language the generalists set expectations that students needed to at least try to use computerized self-service enrollment options and that the generalists' role was to teach. Teaching students how to complete enrollment processes online was noticeable to me because students often asked the generalists to complete an enrollment activity for them, rather than ask if the generalists could explain how to do the activity. For example, some students asked if the generalists could register them in classes. Rather than registering these students in classes, the generalists would explain to the students how to login to the college's self-service system, refer the students
to a nearby computer, and offer hands-on assistance with the software. The process allowed students to acquire additional knowledge and skills related to enrollment.

Additionally, various communication techniques and body language were used by the generalists to encourage students to engage in a conversation with them. Generalists spoke slowly and paused after important points when assisting a student. They provided moments for silence that allowed students to absorb and reflect on the information presented. For example, when generalists explained the steps to enroll, they paused after describing each step to give students an opportunity to ask a question immediately rather than wait until all enrollment steps were explained. At the conclusion of an entire explanation, generalists paused again and asked if there are any questions. The moments of pause also emphasized a relaxed and unhurried pace as if the generalists had an unlimited amount of time to spend with each visitor. However, the generalists did not ask students open ended questions such as "when will you complete your application for admission and take your placement tests" or "what enrollment steps will you complete today and tomorrow." Asking open ended questions would have allowed the generalists to confirm students' understandings about the activities needed to complete the enrollment process.

Related to non-verbal communication, the generalists maintained good posture, a slight leaning forward of their torso with uncrossed arms, and strong eye contact. Their facial features were controlled to those that expressed welcome, interest, concern or empathy when they spoke with students. I also observed that the generalists worked together to schedule lunches and breaks so there were 2 or more generalists at the main desk throughout the day. I believe this arrangement allowed the generalists to have
moments of quiet to maintain the energy needed to engage students and have a supportive colleague nearby. I also noticed, in private moments, when no other students were in the one-stop student services center, generalists occasionally shared feelings with each other around a challenging conversation with the student. The conversation might be an opportunity to discuss whether or not a process needed improvement or simply a chance to voice frustration about a student's request or behavior. Based on my work experience, telling a colleague about a difficult conversation with a student helps me regain composure to move forward with the day's activities.

These communication patterns provided some sense of the techniques the generalists have incorporated into their communication methods with students. They reflected patterns that a newcomer needs to employ in order to be part of their community. These patterns included: extending a brief invitation for assistance, using positive words to motivate and encourage, requesting the use of self-service computers, creating quiet moments for reflection or questions, and maintaining professionalism. From my observations, it appeared the generalists wanted students to feel welcome and respected, encouraged and supported to try enrollment activities including self-service options, and inclined to ask for help.

**Role of Other Student Service Employees in Informal Learning**

At Midwest, other student service employees included academic advisers, admission recruiters, financial aid advisers, and staff members from athletics, housing records and student success. The generalists considered these employees to have more in-depth knowledge than themselves about enrollment processes and policies created by the department that employees the other student service employee. In interviews,
generalists stated that other student service employees expanded their domain of knowledge by helping them answer students' questions that began with "why."

For example, Marie, a generalist, shared that students sometimes wanted to know the reasons for decisions, especially decisions related to financial aid. Marie shared that the student usually began the conversation by asking factual questions such as the date financial aid is disbursed. After providing the answer, some students asked why the disbursement occurred on that date, typically if the student hoped for a different answer. Marie said, "A lot of times students want to know why". To respond, the generalists often sought assistance from other student services professionals.

To provide students the reasons a policy or process is established or offer additional context, generalists shared in their interviews that they turned to other student service employees. Since most students received some type of financial aid at Midwest, it did not surprise me that financial aid policies were mentioned by all generalists as a subject they sought elaboration and clarification from financial aid advisers. For example, the financial aid standards of academic progress policy (SAP) included seven requirements including the student's academic major, grade point average, course completion rate, developmental credit hours, repeated courses, transferred credit hours and overall credit hours. Since the policy has so many requirements, generalists occasionally turned to financial aid advisers when a student questioned his or her SAP status. Typically, students only inquired further when receiving the news that they did not meet SAP standards and was ineligible for financial aid. According to the generalists, their engagement with financial aid advisers helped to build their depth of knowledge
since financial aid advisers expanded on the policy, the student's academic history, and additional context.

May shared that the other student service employees have helped her become more knowledgeable and more confident in the answers that she shared with students. Similarly, Rachel agreed that other student services colleagues provided depth to her understandings and reduced the number of times she asked them questions in the future. When other student service employees answered generalists' questions, they helped the generalists gain a better understanding of a policy's purpose or a process's importance to the organization or the student. In turn, the generalists more confidently answered students' questions pertaining to reason or basis for a decision.

**Formal Social Learning Opportunities**

Whereas day-to-day interactions, including informal social learning, helped develop the generalists' shared knowledge, the College also employed formal social learning through its cross-training program. According to Leigh, the generalists' supervisor, the cross-training program helped all student service employees assist students with enrollment processes. In this section, I explain the cross-training program including past training topics. I also share how the program provided opportunities for the vice-president of student affairs and other administrators to promote organizational values. I include a portion of a student service employee survey to demonstrate the importance of the cross-training program to student service employees. Lastly, I explain archived cross-training materials available for use by anyone in student service who needs to learn or recall information pertinent to assisting students with enrollment processes.
**Role of Cross-Training in Formal Learning**

According to Leigh, the teamwork, training, recognition and communication (TTRC) interdepartmental team members planned, organized and executed a one-hour morning program offered weekly on Fridays. The TTRC team provided leadership by designing training that supported student service goals and topics student service staff members believed worthwhile. The program helped all student service employees gain knowledge necessary to assist with answering one-stop student services telephone calls, participate in rotational shifts at the one-stop student services center main desk, and reply to students' questions when they met on campus, such as at the residence hall or dining center.

At Midwest Community College, attendance at cross-training activities was required by all student service employees. Sessions were held at 9 a.m. on Friday mornings. To support this activity, the one-stop student services center and other student service offices opened to the public at 10 a.m. on Fridays. Through interviews, observation of two cross-training sessions, and review of 2012-13 cross-training minutes, I came to understand the topics considered important in Midwest's cross-training program. Their topics included permanent and rotating items. Meeting minutes identified permanent agenda topics as the sharing of good news, leadership and policy updates, and an enrollment snapshot. Rotating items were focused on building enrollment expertise and team-building.

**Permanent Cross-Training Topics**

A member of the TTRC team began the cross-training session with an opportunity for any attendee to share personal and professional good news within the division. In my
first cross-training observation, the audience celebrated two events—a family wedding and an employee's graduation. These personal announcements created an upbeat atmosphere as the group celebrated collectively about these joyous events. Next, leadership and policy updates were provided by the vice-president of student affairs. In an interview, Susan, the vice-president of student affairs, confirmed that she shared President's Cabinet and/or Board of Trustee's decisions related to their work with students. Student enrollment was another important agenda item I observed discussed at their cross-training program. The topic was presented by Leigh, the one-stop student service center supervisor. In an interview, Leigh reiterated that the vice-president provides a leadership update and she shares an enrollment update each week. She shared:

We have a couple different things on the agenda that are standing. First, Susan [the vice-president] usually does a leadership update about different policies that are going through or [that have] been approved. And then we do an enrollment update [Cheryl agrees] just to show people where enrollments are at.

In my cross-training observation, Leigh emphasized enrollment goals, trends, challenges, and solutions, including activities all employees need to immediately perform to help meet enrollment goals. According to Leigh and the generalists, the enrollment update included information such as number of visitors to the one-stop student services center, admission applications, financial aid packages, academic advising appointments, course registrations including credit hours, course registrations cancelled for non-payment, and financial aid academic progress determinations. Leigh also compared the data to the prior year to help student service employees understand progress towards enrollment goals and rationale for performance expectations. For example, during my
first observation, Leigh shared that there had been an unusually high number of students in the one-stop student services center compared to the prior year. Then she used the data to validate her expectation that additional staff members would rotate to the main desk to assist these students.

Standing items on the cross-training agenda offered employees regular insight into the organization and its needs. For example, the vice-president of student affair's presentation of high-level decisions communicated to student service employees how the College executed its mission and vision. It also communicated to student service employees their value to the College by ensuring they were informed about the decisions made by the highest levels of the organization; it said to them, what you do matters. Additionally, regularly focusing on enrollment activities and trends on Friday mornings conveyed to employees' student service goals such as enrollment targets and performance expectations that contribute to meeting student service goals. Finally, beginning their meeting time with good news created a positive mindset and offered individuals an opportunity to connect with one another personally as well as professionally.

**Rotating Cross-Training Topics**

Additional topics and activities were also an important feature of the cross-training program. According to Leigh, the one-stop student services supervisor, the cross-training program also included a variety of activities that Leigh described as:

...Then any other big updates. So there might be like a curriculum update or the financial aid director might do something related to financial aid. And then we try to do some sort of training or team-building....This is where we do kind of this
continuous improvement process that we go through. We do that during our
Friday morning meetings. So, yeah, a little bit of everything.

It might have been a coincidence that Leigh, describing cross-training as "a little
bit of everything", used the same words as May when she described the generalists'
breadth of knowledge in chapter 5. However, the repetition of the phrase, "a little bit of
everything" also seemed to imply the value of a extensive cross-training program.

According to interview participants, rotating topics included on Friday mornings
changed with the recruitment cycle, academic year, and student service employees’
needs. The 2012-13 meeting minutes listed the following topics: disability services,
housing, continuous improvement projects, customer service standards, new academic
programs, academic program changes, financial aid refunds, and tuition billing. Due to
changing federal regulatory, financial aid was frequently included as a cross-training
topic. Some of the financial aid topics were: student documentation/verification, process
to reinstate financial aid for incorrect non-attendance information, financial aid census
date for late-starting courses, and relationship between FAFSA year and academic
calendar.

In my spring visit, I observed the financial aid director present on required student
documentation/verification. First, he explained the changes for the upcoming 2013-14
cycle. He also distributed the different verification forms, reviewed the information
needed on each form, and demonstrated the computer screen that indicated the form(s)
needed from a student. Based on my financial aid experience, I found the cross-training
sufficient for employees to answer most students' questions about the financial aid
verification process, convey the importance of completing the financial aid verification
forms and explain how to complete each form including the Internal Revenue Service
data retrieval process. In this cross-training session, the financial aid information was
disseminated just as the financial aid office was beginning to mail their 2013-14 letters to
students requesting verification information. This just-in-time training activity
eliminated any lag between knowledge acquisition and its usefulness. The mailing was
anticipated to bring an uptick in student calls and visits. The just-in-time financial aid
training was designed to equip all student service employees to assist students with
routine financial aid verification questions and reduce student wait-time for assistance
with their paperwork.

From participant interviews, I learned an early July cross-training meeting was
expanded to a full-day retreat (all offices closed) and additional time was dedicated to
learning and team-building among all student services employees. This particular
program was dedicated to developing cultural competencies, according to Susan, the
Vice-President of Student Affairs. Susan explained that building cultural competency
aligned with multicultural, international student, and human resource goals. The program
was designed to build competency related to: race/ethnicity, disabilities, and mental
health. One of the stories, the Vice-President of Student Affairs shared, was how the
experience blended learning and team-building. Susan shared how the staff members
shared their personal experiences and stories after watching a video about a Texas
community college student body. Staff members shared how they were judged,
academically under prepared, uninformed about college norms and the significance of
these experience on their student service career.
The Friday morning cross-training program held during my last visit was a conversation about how to improve their enrollment process. (A fuller discussion of Midwest's process improvement program is described in chapter 7.) The previous week employees had debriefed on enrollment activities related to the start of the fall semester. This follow-up discussion did not include any administrators in order to provide the student service staff members more privacy for a frank discussion about strengths, weaknesses, opportunities, and threats. The discussion was led by 2 academic advisers. Staff members offered comments and ideas they felt pertinent to their work with students. Notes were retained on a large flip chart for later reference.

The variety of dynamic cross-training topics was one of the means to expand the student service employees' breadth of knowledge. Enrollment topics included academic and financial matters. Financial aid was mentioned by the generalists as a frequent cross-training topic since financial aid regulations and processes tend to change each application year. Time was also dedicated to conversation around process improvement in order to consider ideas that would enhance student services. By blending learning with team-building, there were opportunities for student service employees to share and interact with one another. Finally, timely presentation of topics permitted more employees to assist students during more hectic periods of the year.

**Employee Feedback**

Susan, the vice-president of student affairs, annually conducted a student service employee survey to gain employee feedback. Susan shared the survey results with me to demonstrate the positive impact of the cross-training program on building student service employees' knowledge. Thirty student service employees were invited to complete the
survey; twenty-five student service employees, including the generalists, participated in surveys and self-assessed their understandings related to: student affairs leadership, strategic planning, customer focus, knowledge measurement, analysis and management, process management and general workplace satisfaction. A score of 1 was the lowest possible score while 5 was the highest. The questions and average scores pertinent to cross-training are provided in Table 12.

Table 12

<table>
<thead>
<tr>
<th>Questions</th>
<th>2012 Score (5.0 maximum)</th>
<th>2013 Score (5.0 maximum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I get all the important information I need to do my work.</td>
<td>3.0</td>
<td>3.42</td>
</tr>
<tr>
<td>I know who my most important customers are.</td>
<td>3.18</td>
<td>4.57</td>
</tr>
<tr>
<td>Student service operations are functioning in a way that improves the customer experience.</td>
<td>2.77</td>
<td>3.92</td>
</tr>
<tr>
<td>Essential work processes are documented.</td>
<td>2.0</td>
<td>4.04</td>
</tr>
<tr>
<td>Documented work processes are communicated or stored somewhere I can find them.</td>
<td>2.0</td>
<td>4.25</td>
</tr>
</tbody>
</table>

All scores increased over the prior year. The increased scores suggest the cross-training program was perceived by respondents to provide value to the student service employees. Employees indicated they knew who was the most important customer and had observed improvements in the customer experience. Documentation of operations also improved over the prior year. Finally, the employees' indicated their knowledge had grown over the prior year. However, since this statement resulted in an average score, it might indicate that employees desire to acquire additional knowledge or an awareness that their breadth and depth of knowledge can be expanded.

The generalists appreciated cross-training opportunities that introduced them to new information and enriched their relationships with other student services employees.
During my summer visit, Marie said the recent session on campus housing was very helpful to her work. Rachel also appreciated the Friday morning programs for the practical information provided such as changes to the college catalog, telephone etiquette instruction, and tips to help students with the online payment plan. Additionally, Rachel valued a one-day Friday retreat where all student service employees talked about personal experiences framed through a cultural competency lens. She felt they grew closer as a team. Marie, while surprised by some of the intense emotions, felt the conversation helped her understand how diversity affected others at Midwest. Based on the survey results and interview comments, generalists valued access to updated information useful to their daily work and team-building opportunities provided through cross-training.

**Role of Cross-Training Materials**

During my second visit, Rachel, a generalist, provided me access to examine the shared computer drive that student service employees used to archive materials and share knowledge with other student service employees. By retaining materials, employees built a shared repertoire of knowledge that other employees can use to assist with learning in the future. However, in my observations, I did not notice the generalists referencing these materials. Still, the documents held interest since they might confirm or contradict understandings about the generalists’ domain of knowledge, social learning activities, or practices with students.

In my review of the electronic documents, I discovered more than 100 folders, some with sub-folders. The range of topics was wide and diverse since all student service employees may store and access files in this shared drive. For example, topics that begin with the letter "C" included: calendar, call center, campus judicial process, career
After reviewing the names of all folders, I chose to open folders whose titles appeared to be most closely related to the generalists and their shared knowledge. I also confirmed with Marie, May, and Rachel, generalists, that these folders represented prior cross-training handouts and knowledge related to their work assisting students. This process led me to the documents located in folders titled: one-stop student service front desk, customer service, Friday morning meetings, cultural competency, results and measurements, and teamwork, training, recognition and communication. The one-stop student services front desk folder maintained student forms, opening/closing instructions, and student employee timesheets. The customer service folder included training materials from past programs. While most of the material was developed by a for-profit business with a product to sell, I was especially interested in one of the customer service documents that included the four key learning stages: listening, reflecting, assimilating and acting, and teaching since this indicated to me that the generalists had received a minimal amount of instructional training. An assessment handout from the Customer Service Institute of America provided a scale to measure customer service which helped me confirm the generalists' interest in student satisfaction. The other folders held Friday morning meeting agendas and minutes and continuous improvement brainstorming notes. Also, the documents May created to standardize data entry and inquiry when assisting students were stored electronically. The documents were useful to confirming May's and Leigh's interview comments about May writing processes and procedures.
When Rachel was helping me locate the shared drive, she explained that the generalists do not frequently use these documents when assisting students since it is usually easier to just ask another generalist to recall a fact or process. Rachel shared how she had hoped the other student service employees who rotate to work at the main desk would find the shared documents helpful, but they also tended to ask a colleague.

Other documents were available at the generalists' work stations or in the supervisor's office. These materials included handouts and notes. For instance, May kept a variety of notes on her computer desktop. The notes were mostly reference tools listing dates and deadlines and computer screens to locate data helpful to answering students' questions quickly and accurately. Leigh, the supervisor, also displayed training handouts and the fall 2013 continuous improvement brainstorming flip chart pages on her office walls for easy reference. One of the training handouts displayed on Leigh's office wall was titled *Digging Deeper*. This handout was created by one of the academic advisers and was used at a past Friday morning cross-training program to teach reflective listening techniques. The title of the document caught my attention since the phrase "digging deeper" had been mentioned by Rachel and Marie in interviews to describe a technique they used when assisting students.

Electronic documentation was more abundant than paper documentation near the generalists' workstations. Perhaps in part because of the limited size of a generalist's workstation and the ease of accessing electronic documents through their laptop computers. The electronic documents appeared to be useful in archiving work processes and cross-training materials, but not as a source of continued dialogue and discussion. The archives provided the community a reference tool, if needed, and a training resource
when new employees are hired in the one-stop student services center. However, since
the documents were not continually updated or reviewed by the generalists they were not
a mechanism to support social learning.

**Social Learning Opportunities Summary**

Generalists rely on informal and formal social learning experiences to build their
shared knowledge. Formal social learning is created through their cross-training program
held on Friday mornings. The cross-training program reaffirms organizational goals and
builds the technical expertise needed to assist student with enrollment. By always
reserving time on the cross-training agenda for the vice-president of student affairs,
student service employees receive on-going communication about high-level decisions
that affect their work. The cross-training program may offer employees opportunities to
make their team stronger as they share common experiences and impart personal
information. By setting aside time to better understand enrollment data and goals, the
cross-training program may help to identify how employees can increase student
satisfaction. Based on student service employee survey data, it appears the cross-training
program has had a positive impact on employees' knowledge. Student service employees'
perceive more communication of important information, increased understandings about
the customer and the customer experience, and improvements in documentation of
operations.

Informal social learning also builds the generalists' domain of knowledge.
Generalists learn from supervisors, other generalists, and other student service
employees. Supervisors who spoke about the importance of students and spending time
with students taught the generalists that students matter. Supervisors also modeled
communication methods helpful to increasing student satisfaction. Other student service colleagues helped to build the generalists' depth of knowledge as they engaged in conversation about students' questions. Generalists helped one another build technical expertise on daily processes such as how to enroll a student in a course, print a tuition bill, and complete the Free Application for Federal Student Aid (FAFSA). When trying to resolve more complex student questions such as multiple charges, payments, and refunds on a student's bill or a student's academic history and academic progress standing, generalists worked together to analyze student record data. I also observed patterns in the approach and language generalists used when assisting students. I believe these patterns represent the knowledge about communicating with students that generalists tacitly share with one another.

Professional training was not routinely provided to the generalists. Only Rachel regularly attended an annual state business officers conference. While several generalists had earned a bachelor's degree, none had attended graduate school. Without the influence of other formal learning experiences, the generalists' relied heavily on Midwest's cross-training program and informal learning experiences to build shared knowledge about enrollment processes and student satisfaction. While the generalists participated in conversation, through cross-training, that generated common approaches to their work assisting students, there was little evidence of the generalists building shared understandings or solutions to problems through social learning activities.
CHAPTER 7

CONTRIBUTIONS TO DEVELOPING STUDENTS' COLLEGE KNOWLEDGE

According to Wenger, McDermott, and Snyder (2002), practice is the knowledge developed, shared, and maintained in order to do or make something. The generalists' practices with students are at the heart of the final research question, how do generalists as a community of practice contribute to developing students' college knowledge? This research question considers how the generalists use their domain of knowledge as they assist students with enrollment processes. In gathering data about the generalists' practices with students, I considered the generalists' domain of knowledge and its application towards helping students develop college knowledge. Also, I examined the generalists' concerns related to student learning and student satisfaction to consider how the community of practice used their questions to inform social learning activities and build their domain of knowledge.

I begin with a description of the generalists' overall student learning outcome. Then, I explain how a simplified enrollment process helps a student enroll at Midwest and pay college costs. I also describe the communication skills and techniques generalists employ to help students become self-sufficient in enrollment processes. Next, I discuss the three college knowledge topics that the generalists help students acquire and build. Finally, I consider the generalists' questions related to their practices with students. The themes and data presented in this chapter are listed in Table 13.
Table 13

*Organization of Contributions to Developing Students' College Knowledge Chapter*

<table>
<thead>
<tr>
<th>Theme</th>
<th>Finding</th>
<th>Evidence</th>
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<td><strong>Student Learning Outcome:</strong></td>
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| Perform Enrollment Activities              | Generalists support students becoming self-sufficient in enrollment activities. | Three interview comments and one observation
  1) Allan (Teach a man to fish)
  2) May (Give knowledge)
  3) Rachel (Give tools and empower)
  4) Observation-generalists teaching     |
| **Simplified Enrollment Process**          | A simplified enrollment process is achievable and creates learning activities related to using technology and identifying deadlines. | Documentation and two interview comments
  1) Document-Enrollment Process
  2) Marie (Helpful to students)
  3) May (Inviting to students)            |
| **Teaching Students**                      | Generalists provide comprehensive instruction.                           | Two interview comments, and three observations
  1) Marie (Prospective students may be unclear)
  2) Rachel (Additional time is needed to assist)
  3) Observation of clarifying the sequence of enrollment steps
  4) Observation of providing financial and financial aid details
  5) Observation of May                     |
| **Generalists use a variety of communication techniques when assisting students.** | Four interview comments, one document, two observations
  1) Document/Observation-oral and written techniques used immediately
  2) Observation-hands-on assistance provided
  3) May (will do anything to help them understand)
  4) Marie (billing statement is a tool)
  5) Marie (student's body language offers cues)
  6) Rachel (active listening to understand and provide options) |
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<tr>
<th>Theme</th>
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<td>Generalists seek to build students' self-confidence.</td>
<td>Observation and two interviews 1) Observation-offering encouragement and assistance 2) May (You can do this) 3) Rachel (Give support)</td>
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<td>Generalist use student record data to provide accurate information and present information within the context of the student's situation.</td>
<td>Four interviews and one observation 1) May (provide accurate information) 2) Marie (don't guess) 3) Rachel (contradictory answers create a poor image) 4) Observation-providing accurate information 5) Marie (accurate information creates happy students)</td>
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| College Knowledge Development     | Generalists build students' skills and knowledge in three areas: technology, financial literacy and time management. | Seven observations and one interview  
  Technology 1) Observation-Referrals to public computers 2) Observation-Offering hands-on assistance 3) Observation-Marie providing assistance with loan worksheet  
  Financial Literacy 4) Observation-Explaining terms, processes, costs 5) Marie (helping understand academic requirements)  
  Time Management 6) Observation-Questions regarding use of time 7) Observation-Explaining time required to complete homework 8) Observation-Marie discussing transportation and childcare |                                                                                                                                           |
| Concerns Related to Practice      | Opportunities to improve practice align with the interest in improving student satisfaction. | Document and three interviews 1) Document-List of practices 2-4) Marie, May and Rachel-Consider student satisfaction important to improving practice |                                                                                                                                           |
From the interviews, I understood the generalists' overall outcome for student learning as: students will perform enrollment activities, utilizing self-service and web applications, to register for courses, apply for financial aid, and pay tuition. This learning outcome required the student to master technology and grasp critical deadlines to become self-sufficient college students. The generalists shared how a simplified enrollment process created a straightforward, clear, and manageable approach that may foster student enrollment. When assisting students, I observed generalists using a variety of communication skills such as active listening, oral instruction, written handouts and hands-on assistance to help students understand the steps to enroll and complete enrollment processes. Also, I observed the generalists offering encouragement and support to build students' confidence. Based on my observations, the generalists offered instruction on three college knowledge topics. These topics were: technology, financial literacy and time management. Finally, I considered how generalists assess their work related to increasing students’ college knowledge in an annual process labeled cycles of program improvement. Documents and interview data suggested that the generalists considered student satisfaction, rather than student learning, when reflecting on how to improve their work. Reflections on how to improve work also led to suggestions for their cross-training program.

**Goal: Self-Sufficient College Students**

The Chinese proverb "Give a man a fish, you feed him for a day. Teach a man to fish, you feed him for a lifetime" was shared by Allan, the former one-stop student services center supervisor, as the Center's philosophy towards assisting students. Allan
emphasized teaching new students the college knowledge and skills necessary to navigate enrollment processes on their own in order to become self-sufficient college students.

This idea was echoed by several other generalists. For example, May described the importance of teaching students to become self-sufficient as "we’ve given them the knowledge right from the get-go to be successful. So that the next academic year when they return, they do it all on their own and they know the process." Rachel emphasized the goal of helping students become self-sufficient when she explained: "It's [self-sufficiency] very important - so if we taught them right the first time, so if we gave them the tools and empowered them to do it themselves the first time, now they're empowered to keep doing it for themselves."

Students' self-sufficiency with the college's enrollment processes was one of the goals of the one-stop student services center. To help students meet this goal, I observed generalists using a simplified enrollment process and various communication techniques to provide instruction related to technology, financial literacy, and time management.

**Simplified Enrollment Process**

A six-step enrollment process emphasized the critical enrollment activities at Midwest Community College. A student handout, see Appendix F, listed the enrollment process as: (a) apply for admission; (b) complete Free Application for Federal Student Aid (FAFSA) and learn about loans and scholarships; (c) submit high school and college transcripts, if previously enrolled; (d) complete course placement; (e) attend new student orientation; and (7) register for courses. When discussing or completing these steps with generalists, students were introduced to the technology incorporated in the enrollment process. Also, since the simplified process did not list a tuition payment due date, the
generalists supplemented the simplified process by presenting tuition payment deadlines during new student orientation and assisted course registration.

The simplified enrollment process, according to Marie, a generalist, especially helped students who struggled with reading, completing complicated processes, or enrolling less than four weeks prior to the start of a new semester. May explained that students may not enroll if the process is too complicated. This interview indicated that brevity helped create an understandable and achievable enrollment process for prospective students. I also noticed in my observations of students in the one-stop that they did not complain about the enrollment process being too difficult which led me to believe students felt the enrollment activities could be accomplished.

The simplified enrollment process was considered important by the generalists because it was straightforward with a manageable number of steps. The process ensured a student could enroll quickly. The process also supported FASFA completion so students could gain access to financial assistance. However, the simplified process did not establish an expectation that a tuition payment was required, neither did it offer tuition payment due dates.

**Teaching Methods**

The generalists considered four elements necessary to teach students how to enroll. First, they shared a belief in comprehensive enrollment information. Next, the generalists shared in interviews how they sought to use multiple communication techniques such as oral, written, and hand-on instruction to help students retain information. Building students' self-confidence was also important to encouraging students to complete the enrollment steps. In observations, generalists used words and
hands-on assistance to build students' self-confidence. Finally, the generalists believed the use of students' academic and financial records was necessary to ensure that they received accurate enrollment information and were satisfied with the one-stop student services center.

Marie, a generalist, shared in an interview how she wanted students to feel after their meetings. She explained:

I would never want them [prospective students] to leave here feeling like nervous, or they don't know what they need to do next, or...they don't have the information that they need. Because then this [college experience] starts off poorly and they don't feel good about this, then they start off their classes not feeling...like they can do it.

Marie's comments suggested the importance of students being informed on how to enroll and feel optimistic in their ability to complete enrollment steps. Students' awareness of enrollment processes and positive feelings about the enrollment processes were equally important to the generalists.

**Comprehensive Instructions**

Allan, a former supervisor in the one-stop student services center, said proactive communication was important. He defined proactive communication as students receiving all information that they needed to enroll in a single visit. This goal could be accomplished by the generalists using their knowledge of enrollment processes to anticipate students' future informational needs and providing the content in their meetings with students. According to Rachel, since students are not always sure how to enroll or
even know the questions to ask to enroll, generalists take time to explain the entire
enrollment process rather than just a part of the process.

I observed generalists using their conversations with prospective students as
opportunities to emphasize all enrollment steps. They also clarified how the steps
interrelated to help students understand how the steps prepared the way for academic
advising and tuition payment. Their conversations focused on the admission process,
academic deadlines, placement tests, financial options, financial aid deadlines, financial
aid documents, academic majors and curriculum, and support systems. For example, they
clarified how completion of Midwest's placement tests or submission of ACT scores
affected enrollment in English and math courses and paved the way for academic
advising at new student orientation. Also, the generalists explained to students how
attendance at a new student orientation was necessary to register for classes. They
explained some of the orientation topics including an opportunity to meet with an
academic adviser and course registration.

The student handout (see Appendix F) listed the enrollment steps, but neglected
financial responsibilities. The generalists compensated for this omission by providing
verbal instruction on the financial policies that students were expected to meet and the
benefit of financial aid towards meeting payment obligations. The generalists also
explained the consequences of failing to meet payment deadlines. Midwest’s policy
called for cancelation of a student's course registration when a student did not pay tuition
or enroll in a payment plan by the tuition due date. In addition, since more than half of
Midwest students received some type of financial assistance, the generalists frequently
discussed the financial aid processes. These conversations offered students instructions
on the financial aid activities necessary to meet tuition payment deadlines and avoid cancellation of course registration due to college payment policies.

A meeting between May, a generalist, and Lisa, a prospective student provided an example of how the generalists' expanded on the six enrollment steps in their conversations with students. Lisa came to the one-stop student services center a few days prior to the start of summer semester. She was transferring to Midwest from a four-year state university. Lisa wanted to take classes that would eventually transfer back to the four-year institution where she had previously attended. After reviewing the enrollment handout, May gave Lisa a transfer guide, reviewed course registration instructions including new student orientation and academic advising, and presented typical costs to attend Midwest. After gathering some information from Lisa about her FAFSA, May advised her to add Midwest to the schools listed on her FAFSA since the FAFSA was the only means for the financial aid office to obtain her financial aid application data and determine financial aid eligibility. May explained to Lisa the importance of enrolling in the College's payment plan while her financial aid application was under review. She shared that enrollment in the payment plan would support her course registration and failure to enroll in a payment plan would result in cancellation of her course registration. May also explained how Lisa's personal financial payment would be refunded if she was eligible for financial aid. This vignette exemplifies how generalists expand on the simplified process by offering additional information related to financial aid and payment policies. In addition, May offered general information about transferring courses that Lisa could review before she attended new student orientation and met with an academic adviser.
The generalists regularly included in their conversations with prospective students the sequence of the enrollment steps and additional financial information to offer content and context that might be needed in the future. Supplementing written information with data gathered from a student's academic or financial records, allowed generalists to predict enrollment processes that might create a problem for a student in the future and offer advice how to avoid difficult circumstances.

**Communication Skills**

I observed and generalists described how they use written, oral and hands-on communication methods to explain enrollment processes. The enrollment handout supplemented the generalists' oral instruction with written instruction. Also, hands-on assistance with self-service technology and online applications was used to teach enrollment processes requiring the use of a computer. When generalists sat with students at the computer, I observed the generalists helping students locate websites and offering instruction on how to complete online forms and computer screens.

The generalists wanted to ensure students understood the enrollment information presented. May stated, "I mean if they don't understand what I'm saying, I will write it down. I will flow chart it. I will do anything to help them understand what's going on."

In an interview, Marie reported that students sometimes had trouble understanding their financial statement including all charges, payments, and refunds. By highlighting and circling important information on the financial statement, she used the statement to help students understand their tuition and bookstore charges, financial aid payments, and financial aid refunds (or balances due). Marie also believed the printed financial statement provided written verification that students could use when discussing their
financial situation with a parent, spouse, or other significant person in their life. By supplementing verbal communication with written communication, the generalists sought to improve students' understandings of enrollment processes.

Additionally, generalists shared how they used students' verbal and non-verbal communication cues to deduce whether the information they were sharing was being understood by the student. A glazed look a student’s eyes, puzzled expression, extensive note-taking, or lack of responsiveness were mentioned by the generalists as cues to change their communication techniques. Marie provided an example of how the students' body language can change abruptly. She explained how some students seeking to add or drop a course will ask the generalists to perform the transaction. Marie relayed that the generalists typically respond to these requests by promoting the use of the self-service registration system. After reminding students about the system, Marie said, "you can tell [they need assistance] when they kind of start to like retract. Because it's, computers are not their thing...or...they'll say, "Well, can you just do it for me?" At that point, Marie explained that the generalists offered to show the students how to complete the transaction in the self-service system to increase students' comfort with the technology. For students not comfortable with technology, Marie shared that hands-on assistance was critical to teaching them.

Listening was also considered important to communicating with students. For example, when helping students, Rachel shared how the generalists listened carefully to students' stories to gain additional insight into their situations. She shared how they also sought to demonstrate compassion and empathy when students' expressed concern about
enrolling or succeeding at Midwest. Through listening, generalists discovered students' concerns related to enrollment or persistence.

The following vignette provided an example of a generalist, May, listening carefully, considering the uniqueness of the student's situation, and demonstrating compassion. May had previously assisted Robert, a student and veteran, in prior semesters and was familiar with some key elements of his life, including his need to work while enrolled in courses and his fear of computers. During the student's visit to the one-stop student services center, Robert met with May immediately following his academic advising appointment. He shared with May the academic adviser's recommendation for a summer course offered in an online format. He explained to May how instructors' lectures provided in a traditional classroom format helped him understand course content and he shared a concern that he would fail an online course. May quickly validated his concern about online learning, located an on-campus course section, inquired as to his work schedule, and assisted the student with course registration through the paper registration process. Registration through a paper process seemed contrary to other observations of generalists’ consistent encouragement of other students to use a computer and complete the self-service registration process. May must have noticed my puzzled look since she immediately shared with me that Robert probably did not tell the academic adviser he wanted to take a course offered in a traditional classroom format. May also shared her knowledge of Robert's discomfort with computers and his unwillingness to receive instruction on the college's self-service registration system.

Another example of how generalists emphasized communication was related to how they gained insights into students' needs. In my first interview with Marie, she
expressed the generalists' desire to consider students' distinct needs. Rachel shared how students typically stated that they had a question when stopping by the one-stop student services center. However, generalists clarified students' needs by inquiring further. She shared how students might not know what question to ask to receive the information that was sought. Rachel referred to the probing process as taking a deeper dive, and she explained that sometimes students do not quickly reveal their concerns, which prompts them to ask follow-up questions. Rachel referred to the process of helping a student express concerns as "unpacking their backpack". Frequent student concerns, according to Rachel, included developmental coursework, financial aid, transportation, lack of emotional support, childcare responsibilities, and work responsibilities. To assist students, the generalists shared information such as financial aid, tutoring resources, bus schedules and routes, additional campus locations, and online course schedules. Rachel shared how the generalists wanted students to have options so they could make decisions without feeling so overwhelmed.

Listening and asking follow up questions was important to the generalists. By engaging a student in conversation, they addressed students' particular concerns. When digging deeper into students’ situations the generalists were able to identify options and offer choices to reduce the weight of students' metaphorical backpacks. Active listening, varied communication techniques, and attention to students' communication cues provided generalists with tools to help them complete enrollment processes and gain information.
Student Self-Confidence

Based on my interviews and observations, the generalists wanted to build students' self-confidence by affirming their efforts to enroll, acknowledging their unique needs, and expressing enthusiasm for their decisions to attend Midwest. When helping students, the generalists built students' self-confidence about enrollment during the first few moments of conversation. For example, I listened to a generalist reassure students by quickly responding "I can help you" after a student confided that he came to the one-stop student services center because he was not sure how to register and did not want to make a mistake. I also heard positive language such as "you can, your options are, and let me show you how" when conversing with students.

In an interview, May explained that students may not be especially confident with using computers or the internet. Since using technology was necessary to becoming self-sufficient with enrollment processes, the generalists wanted to teach students how to use the self-service computer system and complete internet applications. May shared an example of how she encouraged a student who does not have confidence in his or her technological abilities. May stated:

You know, and they’ll [students will] come and they’ll say "well I don’t know how to use a computer and can’t you just do it for me". So it’s building their confidence. [I tell students] you can do this. You can type with one hand if you need to. You can hunt and peck and fill out the form. It’s going to take you a little while but you can do this.... So I don’t know if there are specific words I use or phrases but it’s more, you know, it comes back to that emotional intelligence
portion of knowing when to be there for them and when not to and to step away so that they can do it on their own.

Another example was offered by Rachel who expressed concern about students who withdraw from classes and student success. She shared:

It's [self-confidence is] very important to their success. If they [students] don't think that they're going to succeed, they're not. If they don't think that they can continue with a class, they're not going to succeed. And [we need] to give them the resources and support [to pass]...because once they get past one class and they pass a class, they build their self-esteem that they can actually get through a college course and...first semester.

Rachel felt students needed self-confidence not just to enroll but to complete courses and academic goals. Her passion for student success led Rachel to promote academic support services when students wanted to withdraw from courses. She explained that she liked to better understand how students have attempted to overcome challenges when they ask about withdrawing from a course. If she learned the student did not use college resources, she told them about additional services that might help them succeed rather than withdraw. She also said that she told students how failing a course did not mean failing college. She reminded students to retake the course the next term since their exposure to the subject would help them be successful the next time.

Reassurance, encouragement, and hope were messages that the generalists conveyed to students. They were concerned about whether students could complete enrollment steps and coursework. By offering hands-on assistance at a nearby computer,
referrals to academic support services, and encouragement for the future, the generalists provided students with options to overcome their fears or surmount their challenges.

Accuracy of Information

May believed that students acquired information about Midwest from multiple sources. Parents, teachers and friends provided students with varying types and amounts of information that led them to have different understandings about how to enroll. May also revealed that when students used the internet, they sometimes read only a portion of a college web page or overlooked a link, thus failing to acquire the information they needed to answer their questions. According to May, when students did not receive sufficient or correct information on topics such as admission, financial aid, or other support services, they became dissatisfied with Midwest. May’s solution was to counter with information saying, "So if I can provide them with as much accurate information as possible, that helps them." To provide accurate information, the generalists utilized student record data. Taking the time to review a student's academic and financial records allowed the generalists to describe a policy or process within the context of the student's situation. In addition to reviewing student record data, Marie shared the importance of making referrals. She said the department emphasized, "if you don't know, don't guess...and get them to the right person".

The generalists also discussed their concerns about students who visit the one-stop student services center multiple times to ask the same or similar questions. When students ask the same question more than once, according to Marie, accurate and consistent responses create satisfaction while inaccurate and inconsistent answers fosters dissatisfaction. Marie stated:
I think that it [accurate information] is critical to us, because...when someone calls student services, they [students] don't get the same person every time. And so if we're not providing accurate information that matches what everyone else [employee] is providing, then they really are getting different [answers]…as a whole department, we all need to make sure that we're on the same page so that they [students] don't feel like they're being bounced around and getting false information. And unfortunately sometimes it happens that way. And they [students] just, you know, they'll talk to someone [employee] who wasn't really sure and gave the [wrong answer. For example,] It'll be like a housing [Cheryl agrees] question and someone [employee] will do a "I think I know but…" And then it's, it can come back to really bite you. You know, and they [students] say, "Someone told me…" And someone really did tell them that.

Marie shared an example of when a student was provided inaccurate housing information, and she also conveyed the student's response to this information. In this instance, the student was initially told that the on-campus housing application fee for the criminal background check could be applied to a future term when the student was unable to attend in the fall semester. Later, when Marie explained that the housing policy required the fee to be paid a second time, the student did not believe her. The student refused to accept Marie's statement and the director of housing needed to intervene, reiterating the requirement to pay the fee a second time since an updated criminal background report was needed for the housing application to be further considered. In this instance, the student became angry because the error required the student to unexpectedly pay $100.
Since the generalists observed students' negative reactions to inaccurate guidance, they concluded students who received accurate information were more likely to be pleased with the college. The emphasis generalists' placed on accuracy connected to values such as truthfulness, integrity, and reliability. By being accurate and reliable, the generalists' gained credibility from students and built their trust.

**Teaching Methods Summary**

The generalists used four methods to teach students enrollment processes. First, by using student record data and their enrollment knowledge, the generalists helped students understand potential problems in the enrollment process and options to resolve them. They also considered students' future needs when advising on enrollment processes. Second, the generalists relied on multiple communication methods to help students become self-sufficient with enrollment processes. Oral, written, and hands-on communication methods and appropriately responding to students' communication cues was considered necessary when providing instruction. Through careful listening and follow up questions, the generalists helped students share concerns about enrolling and provided students suggestions about how to address concerns. Next, the generalists used affirmation, guidance, and optimism to build students' self-confidence in their ability to enroll and succeed at Midwest. Finally, the generalists' provided accurate information to gain credibility and trust in the information provided at the one-stop student services center.

**College Knowledge Development**

Three subjects related to college knowledge that helped students to enroll in college emerged through my research: technology, financial literacy, and time
management. I observed the generalists routinely discussing these topics with students and offering them hands-on assistance with self-service computer processes and internet applications. Also, I asked generalists to identify the college knowledge topics they discussed with students. The generalists disclosed how they frequently discussed financing college and creating a schedule around other responsibilities. Additionally, they also believed that some students needed help with electronic applications and processes. When I probed further about whether they taught other college knowledge topics, the generalists did not have confidence they routinely taught other topics. For example, when asked if they helped students with academic planning, the generalists shared their belief that the information was provided by academic advisers and therefore they did not help students choose a major, select courses, or provide transfer information. Also, since the admission and placement testing processes were thought to be straightforward, the generalists did not provide extensive information like a high school counselor might share with a high school student considering multiple colleges and universities.

**Technology**

During my observation periods, I noticed generalists instructed students on how to use self-service computer processes and internet applications. To complete enrollment processes, a minimum level of technology skills was required for a student to become self-sufficient in Midwest's enrollment processes. The minimum level of skills included locating and completing online applications related to admission and financial aid and performing self-service transactions in the college's computer system to register, accept financial aid, register for a payment plan, and view grades. Additionally, students
interested in transferring to a four-year institution could gain course transfer information by accessing a state website.

To teach students the different technologies, I observed the generalists' provide hands-on assistance beginning with the college's application for admission and the (FAFSA) application. They taught students how to login to the college's self-service system and how to use the system to register for classes. They showed students how to accept financial aid award offers, register for a payment plan, and view tuition bills. On federal financial aid websites, the generalists coached students through the FAFSA, direct student loan counseling, and the direct student loan promissory note. For example, it was common for students to seek assistance to log into the college's self-service computer system since they were using it for the first time. Whether needing instruction on how to accept financial aid awards or register for courses, the generalists explained the available features and fields to utilize. During my fall visit, the generalists began guiding students through a new online application process to request an academic transcript by helping them locate the web page, complete the fields on the request form including how to locate the address of another college or university, and pay the $5 fee with a credit or debit card.

Whether filling out an online form or using an internet site or the college's self-service computer system, students differed in their level of comfort and experience using a computer and the internet. By providing students with whatever hands-on assistance they needed to use the different technologies, the generalists offered students a learning experience to build their knowledge and comfort with enrollment related technology.
**Financial Literacy**

I also observed the generalists helping students to develop financial literacy which I have defined as recognizing, recalling and integrating financial concepts and processes such as tuition and other educational costs; FAFSA; financial aid timelines; financial aid awards and refunds; book vouchers; payment deadlines; student loan requirements and repayment; and academic progress requirements. Understanding these processes was necessary to avoid cancellation of course registration for missed tuition payment deadlines, acquisition of textbooks and supplies, and attainment of academic progress requirements to retain future financial aid. The focus on financial aid was an especially important aspect of college enrollment for the many Midwest students who relied on it to attend college.

The generalists discussed financial matters with students by clarifying terms and processes as well as explaining how concepts applied within the context of the students' academic or financial situation. For example, when explaining the costs to attend Midwest, the generalists' helped students understand the net price to attend Midwest by first providing an overall cost to attend the college that included tuition charges and textbook costs. Then, the generalists subtracted financial aid awards to help students understand whether all costs were paid through financial aid. They also discussed whether financial aid was available to help with other educational expenses such as transportation and childcare. If students needed assistance with student loan processes, the generalists reminded them that a loan required repayment in the future.

In order to qualify for federal financial aid, students had to meet federal academic standards, so the generalists talked with students about their academic history, current
academic standing, and projected academic standing. These conversations helped
students to make informed decisions about course registration. Marie shared that it was
sometimes difficult for students to understand what grades they needed to regain
academic eligibility for financial aid or what consequences would occur if they did not
meet academic requirements. She explained that she once had to bluntly explain to a
student that his academic situation would directly impact his financial aid. She said: "If
you don't pass every class this semester, you won't be able to stay living in the dorms."

Financial literacy was necessary to help students to become self-sufficient with
enrollment processes. Without this information students would not have realized the
costs to attend, the financial aid processes, or the financial aid academic requirement to
maintain future financial support. Since the majority of students at Midwest rely on
financial aid to attend, providing financial literacy education was critical to help students
enroll and persist. However, scholarships or student loan debt management was not
discussed, nor did the generalists provide information about Midwest's foundation
scholarships or private scholarships available through local organizations. They also did
not discuss student loan repayment terms or monthly payment amounts. I found this
surprising since the generalists helped students with online federal student loan
counseling and the institution's cohort default rate was slightly over 20% when the
national average for 2-year institutions was 10% (U.S. Department of Education, 2013).

**Time Management**

Helping students' manage their time to meet academic, personal, and professional
responsibilities was the third area of college knowledge that I observed generalists
departing to students. Academic responsibilities included class attendance and class
preparation. Some of the personal responsibilities students shared with generalists included family and childcare whereas professional responsibilities referenced the number of hours the students spent at work. In conversations with students about course registration, I observed that the generalists offered students suggestions about how to incorporate academic commitments into their lives. For example, generalists asked students specific questions about work schedules, childcare, family responsibilities, and transportation to the main campus in order to help them consider how many waking hours they had left for courses and homework in a typical week. These conversations created opportunities for students to share and reflect on how to balance multiple responsibilities. I also noticed that the generalists reaffirmed a philosophy shared at new student orientation about allowing two hours for homework (per week) for every hour of course credit (per term). By reviewing existing time commitments and projecting future time commitments, the generalists helped students reflect on their schedules and commitment to academic success.

An example of building knowledge related to time management occurred when Joanna came to the one-stop student services center to attend new student orientation and register for classes. In their conversation, Marie, a generalist, inquired into Joanna's childcare arrangements for her baby and transportation to campus. Joanna shared that she would probably take the bus and that she had not arranged for childcare. Marie reassured her that it was okay if she did not have all the answers since it was still several weeks before classes would begin. She also explained how knowledge of the bus schedule and childcare arrangements would be important to registering for courses. Marie encouraged
Joanna to stay and attend new student orientation and learn how to use the self-service registration system so that she could start planning her schedule.

How to manage time was part of the college knowledge that I observed the generalists help students to build. In conversation with students, the generalists reaffirmed a college norm of two hours for homework (per week) for each course credit hour (per term), so students understand the amount of time needed to prepare for their courses. With this insight, students were encouraged to reflect on whether their work schedules and personal responsibilities allowed sufficient time for enrollment in one, two or more courses. Teaching students how to create schedules that supported academic, professional, and personal success was essential to the generalists' work.

College Knowledge Development Summary

Initiating students to Midwest's enrollment processes required the generalists to explain more than the steps to enroll. Frequently, it required the generalists to work with a student at a nearby computer terminal and help him or her acquire experience and confidence to use technology to enroll and finance their education. For most Midwest students, instruction on how to afford college was necessary so the generalists also taught students federal financial aid processes and eligibility criteria. To support academic success, the generalists offered guidance on the time commitment to attend and prepare for a course. By listening to students describe their work and personal obligations, the generalists educated students on a college norm related to the time commitment for academic success, and they encouraged students to reflect on academic expectations before registering for a course.
Process Improvement

One reason that I selected Midwest for my study was because the college demonstrated an active program improvement process in the area of student services. According to Wenger (1998), communities of practice capitalize on opportunities to innovate. Midwest's process seemed to encourage generalists to consider ideas to further their work with students. During my fall visit the generalists explained that their most recent Friday cross-training program had been an opportunity to evaluate fall enrollment processes. Susan, the vice-president of student affairs, shared that the annual evaluation was part of formal continuous improvement program. She explained that all student service employees gathered to reflect on the fall enrollment cycle. Organized into small groups, Susan asked the student service employees to brainstorm strengths, weaknesses, opportunities and threats associated with the student enrollment experience. Groups wrote their comments on flip chart paper and discussed ideas about enrollment practices that could be improved. At the conclusion of the conversation, ideas were assigned to teams to study and determine the feasibility of the identified improvements.

Leigh, the supervisor, displayed the continuous improvement documents on her office wall, making it convenient for me to understand practices being considered for improvement. The list of weaknesses and improvements included: creating a better plan to answer students' telephone calls, developing an express lane to answer simple questions quickly, implementing a schedule for additional triage assistance to help students login to computers, increasing signage, evaluating new student orientation, and increasing cross-training. While several of these topics related to scheduling personnel, cross-training and new student orientation might connect to building employees' domain
of knowledge and building students’ college knowledge. Most of the ideas also seemed to reveal an interest in student satisfaction by assisting a student promptly.

I also asked the generalists how student learning was considered in process improvement conversations. May, Marie and Rachel shared that they tend to consider student satisfaction, not student learning, when considering improvement to students’ enrollment experiences. No one recalled conversations about student learning when reflecting on process improvement.

Regular evaluation of enrollment processes was an opportunity to innovate their student services. Most suggestions were considered important to increasing students’ satisfaction by swiftly connecting a student to an employee. The suggestion to improve the cross-training program may lead to increasing the generalists’ domain of knowledge since generalists previously reported, in chapter six, that cross-training helped build their domain of knowledge. The team investigating new student orientation might transform the orientation program or enrollment processes to increase students’ understandings of Midwest’s college majors, college norms and values, and academic support systems, which were topics I observed presented at new student orientation.

**Contributions to Students’ College Knowledge Summary**

The generalists wanted students to be self-sufficient in enrolling at Midwest College. To address student learning, the generalists provided instruction while assisting the students with enrollment activities. According to the generalists, a simplified process made enrollment understandable, achievable, and welcoming for students. The process also created opportunities for the generalists to explain and assist students with online forms and self-service applications.
The generalists also supplemented the simplified enrollment process with additional information such as tuition payment deadlines to offer comprehensive information to help students in the future. Using oral, written, and hands-on communication methods, the generalists reacted to the different ways individuals learn. In addition, the generalists responded to students' communication cues, asking them questions to gauge students' learning and determine further concerns. Remaining positive about the student's abilities and future helped the generalists to build students' confidence with enrollment and academic success. The generalists' commitment to accuracy helped them gain the respect and trust of the students.

I also observed the generalists helping students develop college knowledge in three areas: technology, financial literacy and time management. Helping students develop abilities and confidence using technology was necessary to help them master the college's self-service computer system and complete online applications. The generalists consistently referred students to nearby computers and sat with students to explain the technology and answer students' questions. This instruction was necessary to help some students register, complete financial aid processes, register for a tuition payment plan, and view grades.

I also observed the generalists explaining payment plans, FAFSA, college costs, and financial aid types. By helping students develop financial literacy related to higher education, the generalists offered students options to afford Midwest.

Course registration questions provided generalists with an opportunity to hear about students' time commitments and discuss college norms towards academic studies. I also observed the generalists explain the estimated amount of time to prepare for and
attend class. Their conversations helped students reflect on personal and work responsibilities while making enrollment decisions.

Finally, generalists focused on student satisfaction, rather than student learning, when considering process improvement. Answering a student’s question more quickly was a central concern because waiting was perceived as a negative experience. The suggestion to improve cross-training may increase the generalists’ domain of knowledge since the program previously contributed to their domain of knowledge.
CHAPTER 8
ANALYSIS OF FINDINGS, IMPLICATIONS AND CONCLUSION

Midwest Community College, a pseudonym, was an in-depth case study to discover the generalists' multidimensional knowledgebase, to document a cross-training program that develops employees’ knowledge, and to ascertain the college knowledge related to enrollment that students developed when assisted by a generalist. The site offered valuable richness and complexity to understand how the college’s one-stop student services center supported students with enrollment processes.

My journey as a researcher began in a precarious fashion that may emulate how students experience the road to becoming a college student. When arriving to campus, I felt a little lost and confused about the location of the one-stop student services center. The building with the one-stop center was easy to locate because there was a banner hanging on the facade promoting one-stop services. However, once I entered the building, I did not see a center or a directional sign indicating the correct path. Feeling a little lost and confused reminded me that my feelings were likely similar to students who were unfamiliar with the processes to enroll in college. After I had a better understanding of the building’s floor plan, I came to the realization that I simply needed to wait for the office to open since I arrived early. I imagined my feelings of relief to be similar to the feelings of students who received guidance on the enrollment process.

The participants for this study included four generalists, two supervisors, and the vice-president for student affairs. One generalist who was also a new employee only participated in my research during my last visit due to a recent transfer to the one-stop student services center. One supervisor only participated in interviews during my first
visit due to a change in employment. The subsequent supervisor participated in interviews during my second and third visits. Three generalists, Marie, May and Rachel, provided extensive data in the form of interviews, observations of their work, and documentation. The generalists worked at a circular main desk in the center of the student service area and students sat across from the generalists to discuss how to enroll and finance their education. As needed, the generalists helped students to use nearby computers for online admission and financial aid applications and to access the college's self-service computer system. The pace of each day varied. Whereas some days were slow such as when students had final exams, the number of students visiting the center seemed to be biggest at the beginning of each semester. With easy listening background music, a professional dress code, modern art, posters with positive affirmations, natural light, and orderly furnishings, the one-stop was a sincere and inviting environment for students.

**Research Questions and Main Findings**

The grand tour research question for this study was: How do generalists, as a community of practice, build and convey shared knowledge to develop students’ college knowledge? Three sub-questions guided the data collection for this study:

1. What domains of knowledge do generalists who operate as a community of practice share with one another?
2. How do generalists who operate as a community of practice learn together through cross-training and other social learning activities?
3. How do generalists who operate as a community of practice contribute to developing students’ college knowledge?
During observations and interviews, the participants stressed the importance of developing a substantial domain of knowledge pertaining to enrollment processes, including financial aid, to assist students. Daily interactions with supervisors, student service colleagues, and fellow generalists offered the generalists informal social learning opportunities. Midwest's cross-training program, a form of formal social learning, also increased the generalists' domain of knowledge. Electronic documents, the center's knowledge management tool, served as reference materials and the generalists accessed these materials to recall a process and to train new employees. To increase students' college knowledge and self-sufficiency with enrollment processes, the generalists relied on the college's six-step enrollment process, positive communication, and hands-on assistance. The generalists also offered students specific and precise directions about enrollment processes when they reviewed students' academic and financial records. As the generalists discussed and guided students through enrollment processes, they regularly shared college knowledge in three areas: technology, financial literacy, and time management. After each fall semester, the student services employees used one of their Friday morning cross-training sessions to discuss enrollment processes in need of improvement. When reflecting on the students' enrollment experience, the generalists felt it was important to increase students’ satisfaction. However, one suggestion being considered for improvement, the cross-training program, might help to increase the generalists' domain of knowledge. A summary of the main research findings is presented in Table 14.
### Table 14

**Summary of Main Research Findings**

<table>
<thead>
<tr>
<th>Finding</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>The generalists are experts in Midwest's enrollment processes</td>
<td>Their common knowledge unites the generalists as a unique community within the division of student services.</td>
</tr>
<tr>
<td>The generalists' breadth of knowledge includes admission, financial aid,</td>
<td>The generalists use their breadth of knowledge to guide prospective students through all enrollment steps, provide comprehensive information, and offer hands-on assistance with internet applications and the college's self-service system.</td>
</tr>
<tr>
<td>placement testing, new student orientation, registration, payment options and tuition costs.</td>
<td></td>
</tr>
<tr>
<td>The generalists' depth of knowledge includes students' records and institutional academic and financial policies and procedures.</td>
<td>The generalists use their depth of knowledge to interpret students' records, consider academic and financial policies, explain why individual enrollment problems occurred, and offer guidance to resolve the situation. Also, generalists predict potential enrollment challenges and offer advice prior to the event so students can develop interventions and avoid enrollment problems.</td>
</tr>
<tr>
<td>Formal social learning includes cross-training and electronic resources.</td>
<td>Cross-training creates regular and reoccurring opportunities for generalists to build their domain of knowledge and receive communication pertaining to upcoming student enrollment activities. Electronic resources are a knowledge management tool to reference when assisting students and document processes, policies, and cross-training activities.</td>
</tr>
<tr>
<td>Informal social learning is provided by supervisors, colleagues, and peers. Supervisors affirm the value of spending time with students. Colleagues provide context necessary to understand policies and procedures. Peers, other generalists, assist with development of expertise and demonstrate interpersonal communication.</td>
<td>Professional relationships and interactions with peers, other student service employees, and supervisors build the generalists' domain of knowledge and authenticate the importance of conversations with students.</td>
</tr>
</tbody>
</table>
Table 14 (cont.)

<table>
<thead>
<tr>
<th>Finding</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>The generalists’ want students to become self-sufficient with enrollment processes.</td>
<td>Generalists instruct and guide students on the college's enrollment processes, policies, and systems. By helping students' learn how to complete the enrollment process, the generalists offer students insight into the college's bureaucracy that may helpful in the future.</td>
</tr>
<tr>
<td>The generalists rely on confidence building communication techniques, six-step enrollment process, supplemental oral instruction, and hands-on assistance with internet applications to teach students enrollment processes.</td>
<td>The generalists offer comprehensive instruction, encouragement, and guidance to provide students with a seamless enrollment experience and diminish real or perceived enrollment barriers.</td>
</tr>
<tr>
<td>By reviewing academic and financial records when assisting students, the generalists provide accurate enrollment information.</td>
<td>When students receive clear, precise, and personal guidance they are more likely to be successful in completing enrollment processes. Success builds students' confidence and satisfaction with the college.</td>
</tr>
<tr>
<td>The generalists help students complete electronic enrollment and financial aid applications, secure financial aid, and consider academic demands when building a course schedule.</td>
<td>The generalists afford students an opportunity to build college knowledge in technology, financial literacy, and time management. These areas help students finance college and allocate time for academic studies.</td>
</tr>
<tr>
<td>Generalists regularly assess students’ enrollment experience to innovate their enrollment processes through a student satisfaction lens.</td>
<td>Innovation with attention to students' satisfaction may not lead to improving students' self-sufficiency with enrollment processes.</td>
</tr>
</tbody>
</table>

**Research Question 1 - The Generalists' Domain of Knowledge**

The generalists were experts in Midwest's enrollment processes. Their knowledge guided prospective students through enrollment processes, offered them assistance with online applications, and supported their decision-making. With their breadth of knowledge, the generalists instructed students on the processes to apply, register, and pay for college. Whereas, in a non-integrated student service model, students typically visited multiple student service offices such as admission, academic advising, registration and records, financial aid, and student accounts to receive information and complete
enrollment activities (Beede & Burnett, 1999a; Burnett & Oblinger, 2002). The generalists' domain of knowledge made the students' enrollment experience less hectic, but also increased the college's ability to offer students reliable information and consistent experiences. The generalists' knowledge helped to eliminate students' confusion about enrollment processes and provided sound guidance to complete enrollment process.

Additionally, the generalists' depth of knowledge included academic and financial processes, procedures, and policies that might hinder enrollment. These rules, publicized in college catalogs, student handbooks, course schedules and websites, were difficult for students to locate or understand. To assist students challenged by a policy or process, the generalists offered students details about their academic records including missed or failed courses and explained the tension their academic record posed with college policy. In these situations, the generalists also offered possible solutions. Through the generalists' depth of knowledge, the college established a central location for students to explain their problem and feel heard, receive an accurate explanation including personalize context, and obtain suggestions to resolve the matter.

To share their knowledge of enrollment processes and Midwest's services, the generalists determined how a student was feeling and responded in a positive way. Communicating with sensitivity and tact and offering encouragement were important to the generalists. Using what appeared to be emotional intelligence, the generalists responded respectfully to students, offered them reassurance about the enrollment process, and nurtured students' interest to attend Midwest College.
The generalists' extensive knowledge of financial aid also helped them support the high percentage of low-income students who attended Midwest. This case study demonstrated the importance of tailoring generalists' knowledge and expertise to students' needs. With their knowledge, the generalists assisted students with the application processes; taught students how to access financial aid to purchase books and pay other expenses; and offered options when financial aid was limited due to the academic progress policy. Whereas my institution, Oakton, has a sizeable English as a second language (ESL) student population. Since the ESL department has unique academic advising and registration rules, it is critical for Oakton's generalists to know the ESL rules to meet these students' needs.

Midwest's generalists also helped students connect to other student services such as academic advising, but Midwest missed an opportunity to have the generalists help students prepare for the academic advising appointment. If the generalists had more knowledge of academic advising, they could have provided direction on how to prepare for the students’ meeting time. For example, the generalists could have taught students how to print their academic transcript or degree audit report to enabled students' reflection on the courses needed to complete their academic program. They also might have encouraged students to write a list of their questions to show the adviser at the onset of the appointment to receive advice on subjects of concern.

**Research Question 2 - The Generalists' Social Learning Opportunities**

The generalists participated in a variety of social learning activities to build and maintain their domain of knowledge. Daily interactions with supervisors established engagement with students as a priority. The generalists understood that teaching students...
was the most important work performed from their observations of college administrators engaging with students. Weekly cross-training and daily activities with colleagues including other generalists increased the generalists' knowledge of enrollment processes and the reasoning behind particular tasks or policies. Tacit knowledge, obtained through daily observation of colleagues, shaped the generalists' understandings about communicating with students. Generalists also retained their knowledge in shared electronic resources.

The generalists' social learning activities indicated informal and formal social learning were necessary to build their domain of knowledge. Prior supervisors, college administrators, made their greatest emphasis when they led by example and modeled desired behavior. Employees in higher positions or with more years of service shared history and context about enrollment processes to increase the generalists' domain of knowledge. Midwest's regular cross-training program, an example of how community colleges can create social learning opportunities, emphasized communication, instruction on topics related to assisting students with enrollment processes, and team building. Through cross-training program, student service employees received opportunity to develop public speaking skills, create programming, demonstrate expertise, and exercise creativity. Cross-training also established the minimum amount of knowledge necessary to assist students with enrollment processes.

Professional development, outside the college, was not regularly provided to the generalists. Rachel was the only generalist who regularly attended an annual state conference. Professional training opportunities could expand the generalists' domain of knowledge to include additional theories, models, best practices, and research related to
community colleges, enrollment processes, and student success. Outside expertise might also enhance the generalists' understandings about teaching and communicating with students since cross-training on these topics has been minimal. Since the generalists have informally built their emotional intelligence, outside professional development in this area may offer them additional ideas to support students. Experts in these areas may be part of the college's faculty making the cost to provide additional training minimal.

**Research Question 3-Generalists Developing Students' College Knowledge**

This research question led to understanding the generalists' approach to student learning, their teaching methods, and process to improve enrollment processes that help students develop college knowledge. Generalists wanted students to become self-sufficient in enrollment processes. Their teaching methods included a simplified written enrollment process, comprehensive verbal instruction, communication techniques, and encouragement. The generalists' guidance assisted students with building college knowledge in technology, financial literacy, and time management. Their process to improve enrollment processes generated ideas from student service employees that might improve student satisfaction rather than student learning.

To reduce students' fear or hesitation about enrollment processes, the generalists affirmed students' efforts and offered hands-on assistance. Without this type of direction, prospective students might have become discouraged and not enrolled. At Midwest, encouragement through the financial aid process was especially important for prospective students since the FAFSA had more than 100 questions and included jargon so specialized it might be unintelligible for someone who has not previously completed a financial aid application. The generalists' encouragement of students through challenging
experiences has some similarities to Rendón's (1994) validation theory. Rendón defines validation as an "enabling, confirming, and supportive process initiated by in- and out-of class agents that foster academic and interpersonal development" (p. 44). When the generalists extended themselves to teach students and created a supportive learning environment, they were validating students’ efforts and progress. The generalists also humanized the enrollment experience by offering students a 'high touch' experience within a system built on technical processes, a specialized vocabulary, and complicated rules.

Related to college knowledge, the generalists provided additional guidance and instruction concerning technology, financial literacy, and time management. Since some students did not feel confident using the internet or understood directions, hands-on assistance guided students through enrollment processes. The instruction helped students become familiar with the software so they could use it on their own. As previously mentioned, students can find it difficult to apply for financial aid or interpret financial aid terms. So, the generalists' assistance helped students to access financial aid necessary to enroll. Despite the important role generalists had supporting low-income students, expanding their teaching to include student loan debt management activities would help to ensure students borrowed wisely. Third, the generalists helped some students develop a strategy to incorporate courses and homework in their busy lives when discussing the process to register for courses. By providing hands-on assistance, listening carefully, and offering detailed guidance based on their review of the students' academic and financial records, students gained the support and knowledge to make decisions and complete enrollment activities.
The generalists were in a position to help students develop additional understandings of college norms, values, college culture, and support systems (Conley, 2007, 2008, 2010, 2012). This type of college knowledge could have been included in conversations with prospective students and might help ease students’ transition to the college. For example, the importance of attending classes seems like a missed opportunity to help some students avoid the challenges that occur when faculty report the student as not attending. Also, Midwest provided academic support services including Trio and tutoring. Making students aware of these free services and how to access them could have been regularly promoted when students registered for courses.

Finally, the findings indicated the generalists were more likely to consider student satisfaction when considering improvements to their enrollment processes. According to Bliming (2001), individuals with this perspective are more likely to consider the student as a consumer whereas individuals focused on student learning consider ways to help students to develop skills and knowledge. Midwest's assessment, primarily through a student satisfaction lens, failed to generate suggestions on how to improve work that helps students to become self-sufficient in enrollment processes. Given Midwest's goal of student's self-sufficiency, it is necessary for them to assess the generalists' teaching methods and students' learning. Assessment through a student learning lens may help Midwest discover gaps in their students' college knowledge and develop new teaching activities to improve their students’ work. For example, when teaching, they could discuss the importance of asking open-ended questions and, in conversations with students, consider ways to introduce open-ended questions. The generalists also may
consider ideas on how to illicit from students at the end of a conversation what
enrollment tasks they will perform and when the tasks will be completed.

Mapping Generalists' Knowledge, Social Learning, and Practices Developing
College Knowledge

There were relationships between the generalists' domain of knowledge, social
learning activities, and practices with students. In general, social learning activities
increased the generalists' domain of knowledge; the domain of knowledge provided
generalists the knowledge necessary to assist students with enrollment processes; and
evaluation of enrollment processes stimulated social learning activities. The generalists'
knowledge helped them provide students a manageable enrollment process, create a
supportive environment, and ensure the accuracy of answers. The generalists'
experiences with students and process improvement program, led to ideas about promptly
connecting students to employees and improving cross-training activities. The
complexity of the concept map (chart 1) illustrates the richness of the generalists'
community of practice. The generalist position is in the center of the diagram and
connects immediately the domain of knowledge, social learning activities, and practices
with students to develop college knowledge. Arrows connect the findings to the three
research questions and one another.
Figure 3

**Conceptual Map of the Generalists' Domain of Knowledge, Social Learning Activities, and Practices Related to Developing Students' College Knowledge**
Connections to Literature

This section of the chapter is organized by the three research questions. Each subsection considered similarities and differences between key findings and community of practice, one-stop student services center, and college knowledge literature.

Research Question One: Generalists' Domain of Knowledge

The results of this study concurred with other case studies (Anderson & Elliott, 1999; Anderson, 2002; Day & Pitts, 2002; Lewis, 1999; Shurgart & Romano, 2008; Van Voorhis & Falkner, 2002) that described generalists possessing an exceptional amount of information. The results expanded on the prior case studies by providing narratives that clarified the generalists' knowledge and application to assisting students. The generalists' financial aid knowledge at Midwest was more defined and comprehensive than described in prior case studies, perhaps due to the economics within the geographical area. Providing students comprehensive financial aid instruction seemed to increase the likelihood students would be aware of how to access this resource. The narratives included in this study offer insight into the emotional intelligence that generalists use to connect and support students.

The generalists' domain of knowledge demonstrated a particular level of competency about enrollment processes that separated them from other student service employees. The generalists' knowledge was unique to their role and their institution. Also, the generalists considered knowledge of Midwest's policies and processes critical to master. Their point of view aligned with Wenger's (1998) ideas about a community of practice possessing shared interests and knowledge. The generalists intentionally built their domain of knowledge around their shared experiences assisting students who
needed a variety of information and students who faced more difficult enrollment challenges.

The generalists' domain of knowledge also included some topics listed in college knowledge literature (Bell, Rowan-Kenyon & Perna, 2009; Conley, 2007, 2008, 2010, 2012; Kirst, Venezia, & Antonio, 2004). The generalists' knowledge, while specific to Midwest, included admission processes and deadlines; financial aid options, deadlines, and documents; college costs; placement tests; types of majors/curriculum; some college norms; and academic support services. However, the generalists' domain of knowledge did not include other college knowledge topics such as college admission selection criteria, career options or career requirements. Educating students on college admission selection criteria may not be necessary for students who have already committed to enroll at Midwest. Yet, introducing sources of information to research career options and career requirements seems important to share with students, especially students unsure of their college major or career goal. While Midwest referred students off-campus for career services information, the generalists could have suggested that option more frequently.

**Research Question Two: Social Learning Opportunities**

The themes that emerged from the social learning research question indicated the generalists participated in regular and recurring formal and informal learning activities. The dependability of the weekly cross-training program was similar to how Wenger (1998) considered social learning essential in a community of practice in order to build relationships, develop common approaches, create shared understandings, and inspire solutions to problems. The cross-training program built expertise, created team-building opportunities, and fostered process improvement.
The generalists also engaged in everyday conversations that reaffirmed the important aspects of their work and built their expertise. Conversations with supervisors and other student service colleagues indicated information was exchanged similarly to Lave's and Wenger's (1991) and Wenger's (1998) ideas about transmission of knowledge occurring through daily interaction and mutual engagement since the generalists conversations with colleagues pertained to students, enrollment processes, and college policies.

An inter-departmental team at Midwest to organize and led the cross-training program. An adjustment to Friday's office hours and requirement for all student service employees to attend cross-training were forms of institutional support towards the community of practice. Similar to Gordin (2006), Koan (2011) and White (2004) who argued institutional support was necessary for a strong community of practice, Midwest's commitment to provide leadership and resources for their cross-training program was an investment likely to sustain an institutional culture supportive of engagement and professional development.

Their cross-training curriculum had some similarities to other one-stop cross-training programs (Day & Pitts, 2002; Foucar-Szocki, Harris, Larson, & Mitchell, 2002; Green, Jefferis, & Kleinman, 2002) in so far as it built expertise related to enrollment processes. The breadth of Midwest's topics demonstrated the importance of remaining current on a variety of processes, services, and activities at the college. The frequency and variety of financial aid topics indicated the value of financial aid for Midwest's students and the complexity of mastering financial aid processes.
Midwest's cross-training program was similar to Seton Hall's focus on admission, registration, financial aid, and student accounts (Green, Jefferis, & Kleinman, 2002) and Johnson County Community College's attention to frequently asked questions (Day & Pitts, 2002). Additionally, Midwest provided cross-training on similar topics offered at James Madison University such as customer service, program improvement, student service policies (Foucar-Szocki, Harris, Larson, & Mitchell, 2002). However, Midwest did not include student learning, teamwork (Foucar-Szocki, Harris, Larson & Mitchell) or leadership (Anderson, 2002). The similarities and differences suggest that institutions customize their cross-training curriculum to meet students' needs. Additionally, leadership training may create opportunities to enhance team building and group development. In turn, a stronger group may help Midwest meet its student service goals. The absence of student learning from Midwest's training topics may signify an opportunity to build knowledge that improves teaching methods and helps students become self-sufficient in enrollment processes.

**Research Question Three: Development of Students' College Knowledge**

The generalists' desire for students' to become self-sufficient in enrollment processes connected to ideas about the need for particular skills and knowledge to matriculate and enroll in college (Bell, Rowan-Kenyon, & Perna, 2009; Conley, 2007, 2008, 2010, 2012; Deil-Amen & Rosenbaum, 2003; Rosenbaum, Deil-Amen & Person, 2006; Karp, 2011; Kirst, Venezia, & Antonio, 2004) and mission's from other one-stop student services centers ((Anderson & Elliott, 1999; Anderson 2002; Day & Pitts, 2002; Foucar-Szocki, Harris, Larson, & Mitchell, 2002). Mission statements from one-stop
student services centers emphasized working with students in supportive partnerships to foster student learning and personal growth, and connect to academic support services.

Absent from the college knowledge literature was the importance of students understanding how to use various technologies to apply for admission and financial aid and plan their time wisely. It is unclear whether prior college knowledge studies considered technology important to enrolling or made an assumption that students knew how to complete applications on the internet and use self-service systems. This study demonstrates that technology is a unique skill and knowledge and necessary for community college students to enroll in college. For students with limited financial resources, college knowledge specific to financial aid and college costs was critical to make enrollment and financial decisions (Bell, Rowan-Kenyon, & Perna, 2009; Conley, 2007, 2008, 2010, 2012; Deil-Amen & Rosenbaum, 2003; Rosenbaum, Deil-Amen & Person, 2006; Kirst, Venezia & Antonio, 2004). Similar to prior studies, helping Midwest students gain financial literacy was necessary for students to enroll. This study identified the generalists as essential student service professional who help community college students gain financial literacy.

The generalists at Midwest also helped some students gain knowledge that helped them utilize their time effectively. For Midwest students, many of whom have jobs and families, it was necessary to help them understand the amount of time required to be academically successful. They needed to balance their personal and professional commitments with academic expectations. Prior studies on college knowledge (Bell, Rowan-Kenyon, & Perna, 2009; Conley, 2007, 2008, 2010, 2012; Deil-Amen & Rosenbaum, 2003; Rosenbaum, Deil-Amen & Person, 2006; Karp, 2011; Kirst, Venezia,
& Antonio, 2004) did not report time management as important college knowledge. This study suggests community college students need to fully understand the amount of time required for academic success and the generalists, through their work assisting with course registration, help students gain these understandings.

Some types of college knowledge were not necessary for Midwest students to acquire whereas other types might have enhanced the enrollment experience. College knowledge related to selecting a college and applying at selective institutions was not essential to enroll at Midwest. Taking an ACT or SAT exam and earning a particular score was not critical. Enrolling at an open admission college, near home, may have been the only option for some Midwest students to attend college and this limitation is not discussed in college knowledge literature. Whereas college knowledge about academic majors including transfer options, career requirements, and academic expectations would likely help students with academic planning, however providing this assistance generally exceeded the role and expectations of Midwest’s generalists. Helping students understand available support systems (Conley, 2007, 2008, 2010, 2012) is information easily shared by generalists and would offer students options to support their transition to college.

**Implications for Practice**

This study provides community college practitioners an extensive model of the generalists’ knowledge in a one-stop student services center, their social learning experiences, and their techniques to help students build college knowledge necessary to enroll. Through the generalists’ depth and breadth of knowledge, they provide students consistent and reliable assistance with a variety of enrollment processes. Generalists also
provide students humanity in a bureaucratic and technical enrollment system by offering
guidance and validating students' efforts with words of encouragement. The generalists' emotional intelligence helps them communicate in ways that lets students know they matter, a concept Schlossberg (1989) considers important to student success. Generalists also offer institutions an opportunity to begin building students' college knowledge related to enrolling and financing their education, a practice the Center for the Study of Community College Student Engagement (2008) claims supports new students' success, during students' initial visit to the one-stop student services center.

This study distinguishes the depth and breadth of knowledge a generalist needs to assist students on their campuses. Knowledge to answer frequently asked questions and discuss application processes must be complimented with sufficient depth to assist students with problems that limit their ability to enroll. A generalists' depth of knowledge also enhances their ability to predict challenges students might encounter and offer suggestions about how to avoid the problem. Additionally, this study identifies the financial aid knowledge necessary to assist low-income students who enroll at 2-year institutions in greater numbers than at 4-year institutions (Horn & Nevill, 2006). In their work, generalists help students gain access to financial assistance and overcome a public perception that financial aid is difficult and incomprehensible (Duncan, 2013). Just as Midwest customized the knowledge of their generalists about their students' needs, this study helps practitioners realize the importance of helping generalists to build their knowledge about the needs of the students at their institution.

Community college practitioners benefit from how this study reveals the connections between social learning activities, the generalists' domain of knowledge, and
methods to assist students with enrollment processes. Informal and formal social learning, including tacit learning, teach generalists to appreciate engagement with students, build expertise in enrollment processes, and develop communication skills. Whereas generalists use emotional intelligence when assisting students, the study also suggests that the addition of pedagogy or teaching methods to the generalists' professional development would enhance their ability to develop students' college knowledge. Institutions interested in one-stop student services centers also become more aware of the importance of providing institutional resources for regular, sustained, and comprehensive cross-training and professional development.

Through this study, community college administrators consider the importance of student learning, rather than student satisfaction, to student success and imagine how they might teach students' the college knowledge necessary to enroll. The study demonstrates the important role generalists have teaching students how to apply, register, and pay for college during the initial stages of enrollment. Through their work, they help students develop college knowledge related to technology, financial literacy, and time management. Results also suggest the generalists' role could be expanded to help students gain greater understandings of academic support services, of other student service offices such as academic advising and career services; and of student loan debt management concepts and academic expectations.

**Recommendations for Future Research**

Since this was a single site case study, additional research at community colleges serving different student populations will verify findings and increase understandings of the generalists. Also, expanding the research to include institutions that have a career
services department as part of their one-stop student services center is necessary to
understand how generalists connect students to career services. Finally, studies to
examine students' learning, related to college knowledge, after receiving assistance from
generalists would increase understanding of learning provided at one-stop student
services centers.

Conclusion

The one-stop student service model, with the generalists at the heart of the model,
offers community colleges a practice to provide students consistent and reliable
information necessary to enroll and gain college knowledge related to technology,
financial literacy, and time management. For generalists to be successful in this work,
they must have comprehensive knowledge of the institution's policies, processes and
procedures, student records, and related technologies and emotional intelligence to
encourage and support students. Formal social learning activities such as cross-training
helps generalists develop their enrollment expertise. Also, daily interactions with
colleagues exposes generalists to new ideas and contextual information. Supervisors who
engage with students, model the importance of assisting students at the college and help
generalists find value in their work. Generalists use their knowledge to teach students
how to become self-sufficient with enrollment processes. Their teaching methods
included a simplified written enrollment process, comprehensive verbal instruction,
communication techniques, and encouragement. Their personalized attention is likely to
help students feel supported through the transition to college. Assessment of their work
could be enhanced by reflecting on teaching and learning rather than student satisfaction.
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APPENDIX A

Recruitment Communication

Date: January 2, 2013
To: Midwest Region Community College Senior Student Service Officers
Subject: Suggestions/Ideas about One-Stop Student Service Centers
From: Cheryl Warmann

You are invited to provide the names of Midwest community colleges that utilize a one-stop student service center for consideration as a research site in a dissertation study.

The ideal one-stop center clusters student affairs offices within close proximity to one another and also provides students a single front desk. The front desk staff members, acting as generalists, help students gain a richer and deeper understanding of how community colleges work and what they need to know to enroll, be successful as community college students (Beede, 1999; Day & Pitts, 2002; Javaheripour, 2009; Shugart & Romano, 2008; Walters, 2003) by assisting students with college related business in areas such as admission, financial aid, registration and records, and connecting students to important resources and specialists.

How generalists build and convey shared knowledge about college knowledge, as a community of practice model (Wenger, 1998), is the primary research question of my dissertation study.

If you have ideas about possible community college one-stop locations or questions about this research study, please contact me at warmann2@illinois.edu or 847-635-1719 or my adviser, Dr. Debra Bragg at dbragg@illinois.edu or 217-244-8974. I am a graduate student at the University of Illinois at Urbana-Champaign enrolled in the educational organization and leadership doctoral program and the Director of Enrollment Services at Oakton Community College located in Des Plaines, Illinois.

Thank you!

Sincerely,

Cheryl Warmann
Employee Consent Letter

[Current Date]

You are invited to participate in a research project on community college one-stop student service staff and how they engage in learning to improve their work with students. This project will be conducted by Cheryl Warmann and Professor Debra Bragg from the Department of Educational Policy, Organization, and Leadership at the University of Illinois at Urbana-Champaign.

In this project, Cheryl Warmann will be on your campus for approximately 50 hours over 3-4 weeks observing generalists' activities related to training and learning about work processes and student interactions associated with gaining admission and navigating within the college. The observations will include cross-training, other training activities and public interactions with students, like at a reception desk, about admission, financial aid, course registration, tuition payment and other college policies or processes. Notes will be limited to the interactions and activities observed. In addition, you will be asked to participate in three 60-minute interviews, one at the time the study begins, a second at the mid-point of the study, and a third at the conclusion. In these interviews, which will be audio-recorded with your permission, you will be asked to discuss your cross-training and learning activities related to supporting community college students in enrollment and persistence. Your identity will be protected by the use of a pseudonym name for coding observation notes and interview transcripts. The audiotapes will be kept in a locked file cabinet and will be accessible only to the researchers. Additionally, the audiotapes and all other information obtained during this research project will be kept secure and destroyed three years after the project is completed.

We do not anticipate any risk to this study greater than normal life and we anticipate that the results will increase our understanding of effective techniques to create an integrated network of financial, social, and academic support for community college students. The results of this study will be used for a doctoral dissertation and may be used for a scholarly report, journal article and conference presentation. In data collection and publication or public presentation, pseudonyms will be substituted for any identifying information.

Your participation in this project is completely voluntary, and you are free to withdraw at any time and for any reason without penalty. You may ask the researcher to stop observing at any point in time during a staff or student interaction and request that observational notes be destroyed. You are also free to refuse to answer any questions you do not wish to answer. Your choice to participate or not will not impact your job or
status at school. You will receive a copy of the research results after this project is completed.

If you have any questions about this research project, please contact Ms. Warmann by telephone at 847-635-1719 or by e-mail at warmann2@illinois.edu or Debra Bragg at 217-244-8974 or dbragg@illinois.edu.

Sincerely,

Cheryl Warmann

________________________
I have read and understand the above information and voluntarily agree to participate in the research project described above. I have been given a copy of this consent form.

☐ yes  ☐ no   I agree to have the interview audio-recorded for the purposes of transcription.

________________________  __________________________
Signature                          Date

If you have any questions about your rights as a participant in this study or any concerns or complaints, please contact the Institutional Review Board at 217-333-2670 (collect calls will be accepted if you identify yourself as a research participant) or via email at irb@illinois.edu.

Vice-President of Student Affairs Consent Letter

[Current Date]

You are invited to participate in a research project on community college one-stop student service staff and how they engage in learning to improve their work with students. This project will be conducted by Cheryl Warmann and Professor Debra Bragg from the Department of Educational Policy, Organization, and Leadership at the University of Illinois at Urbana-Champaign.

In this project, Cheryl Warmann will be on your campus for approximately 50 hours over 3-4 weeks observing generalists, front-line student service staff members, activities related to training and learning about work processes and public student interactions.
associated with gaining admission and navigating within the college. In addition, you will be asked to participate in three 60-minute interviews, one at the time the study begins, a second at the mid-point of the study, and a third at the conclusion. In these interviews, which will be audio-recorded with your permission, you will be asked to discuss your insights of the generalists’ cross-training and learning activities related to supporting community college students in enrollment and persistence. Your identity will be protected by the use of a pseudonym name. The audiotapes will be kept in a locked file cabinet and will be accessible only to the researchers. Additionally, the audiotapes and all other information obtained during this research project will be kept secure and destroyed three years after the project is completed.

We do not anticipate any risk to this study greater than normal life and we anticipate that the results will increase our understanding of effective techniques to create an integrated network of financial, social, and academic support for community college students. The results of this study will be used for a doctoral dissertation and may be used for a scholarly report, journal article and conference presentation. In data collection and publication or public presentation, pseudonyms will be substituted for any identifying information.

Your participation in this project is completely voluntary, and you are free to withdraw at any time and for any reason without penalty. You are also free to refuse to answer any questions you do not wish to answer. Your choice to participate or not will not impact your job or status at school. You will receive a copy of the research results after this project is completed.

If you have any questions about this research project, please contact Ms. Warmann by telephone at 847-635-1719 or by e-mail at warmann2@illinois.edu or Debra Bragg at 217-244-8974 or dbragg@illinois.edu.

Sincerely,

Cheryl Warmann

I have read and understand the above information and voluntarily agree to participate in the research project described above. I have been given a copy of this consent form.

☐ yes  ☐ no  I agree to have the interview audio-recorded for the purposes of transcription.

Signature  Date

If you have any questions about your rights as a participant in this study or any concerns or complaints, please contact the Institutional Review Board at 217-333-2670 (collect
calls will be accepted if you identify yourself as a research participant) or via email at irb@illinois.edu.

**Student Consent Letter**

[Current Date]

You are invited to participate in a research project on community college one-stop student service staff and how they engage in learning to improve their work with students. This project will be conducted by Cheryl Warmann and Professor Debra Bragg from the Department of Educational Policy, Organization, and Leadership at the University of Illinois at Urbana-Champaign.

In this project, Cheryl Warmann will be on your campus for approximately 50 hours over 3-4 weeks observing generalists, front-line student service staff members who assist students with admission and other general college issues in a public setting such as a front desk or other public office area. She will observe generalists’ activities related to training and learning about work processes and public student interactions associated with gaining admission and navigating within the college. Observation will not include conversations held in a private office. In this observation, notes will be written about inquiries made and information shared in college business areas such as admission, financial aid, registration or records. The researcher will only take notes and any names will be changed to a pseudonym in order to protect participants' privacy. The notes will be kept secure and maintained in a in a locked file cabinet, accessible only to the researchers, and will be destroyed three years after the completion of this study.

You are being asked to allow Ms. Warmann to observe your interaction with the student services generalist staff member and no additional participation is necessary. We do not anticipate any risk to this study greater than normal life and we anticipate that the results will increase our understanding of effective techniques to create an integrated network of financial, social, and academic support for community college students. The results of this study will be used for a doctoral dissertation and may be used for a scholarly report, journal article and conference presentation. In data collection and publication or public presentation, pseudonyms will be substituted for any identifying information.

Your participation in this project is completely voluntary, and you are free to withdraw at any time and for any reason without penalty. You may also ask the researcher to stop observing at any point in time in your conversation with the generalist. Your choice to participate or not will not impact your status at school.

If you have any questions about this research project, please contact Ms. Warmann by telephone at 847-635-1719 or by e-mail at warmann2@illinois.edu or Debra Bragg at 217-244-8974 or dbragg@illinois.edu.
Sincerely,

Cheryl Warmann

I have read and understand the above information and voluntarily agree to participate in the research project described above. I have been given a copy of this consent form.

☐ yes  ☐ no  I agree to have my conversation with the one-stop student service generalist observed.

________________________  __________________________
Signature                                      Date

If you have any questions about your rights as a participant in this study or any concerns or complaints, please contact the Institutional Review Board at 217-333-2670 (collect calls will be accepted if you identify yourself as a research participant) or via email at irb@illinois.edu.
APPENDIX C

Generalist-Student Interaction
Observational Record

Date:___________________  Start time:_________________  End time:_____________

Attach student consent form to this document.
Generalist’s Pseudonym:____________________________

1) Student Request

☐ Admission
☐ Financial Aid
☐ Course Registration
☐ Tuition Payment/Cashiering
☐ Other college process:___________________________________________________
☐ Other college policy:_____________________________________________________
☐ Other:________________________________________________________________

2) Generalist Action

☐ Information provided
☐ Transaction processed (e.g.: add or drop a course, accept a tuition payment)
☐ Teaching use of self-service system
☐ Teaching how to locate on internet

Included information from the following areas:
☐ Admission
☐ Financial Aid
☐ Course Registration
☐ Tuition Payment/Cashiering
☐ Referral to specialist:_____________________________________________________
☐ Provided additional information:___________________________________________
☐ Referral to academic support services (e.g.: tutoring)
☐ Other:________________________________________________________________

Notes:
3) Student Follow-Up Request

☐ Admission
☐ Financial Aid
☐ Course Registration
☐ Tuition Payment/Cashiering
☐ Other college process:______________________________________________
☐ Other college policy:_______________________________________________
☐ Other:________________________________________________________________

4) Generalist Follow-Up Action

☐ Information provided
☐ Transaction processed (e.g.: add or drop a course, accept a tuition payment)
☐ Teaching use of self-service system
☐ Teaching how to locate on internet

Included information from the following areas:

☐ Admission
☐ Financial Aid
☐ Course Registration
☐ Tuition Payment/Cashiering
☐ Referral to specialist:______________________________________________
☐ Provided additional information:________________________________________
☐ Referral to academic support services (e.g.: tutoring)
☐ Other:________________________________________________________________

Notes:
APPENDIX D

Cross-Training and Other Social Learning Activities
Observational Record

Date:____________ Start time:____________ End time:___________

Attendees:_____________________________________________________________
______________________________________________________________

Attach agenda and handouts to this document.

1) Type of Activity

☐ Cross-Training
☐ Other Professional Training (on-site):
☐ Other Professional Training (off-site):
☐ Staff Meetings
☐ Other On-Site Meetings:
☐ Other:

2) College Knowledge Topic(s)

☐ Admission
☐ Financial Aid
☐ Course Registration
☐ Tuition Payment/Cashiering
☐ Referrals to specialist:
☐ Referrals to academic support services (e.g.: tutoring)
☐ Other:

3) Questions/Impressions/Discussion--Key Points

Notes (include why employees have their understandings):
4) Action/Decisions Made

Notes (include how knowledge will be stored--made explicit):
APPENDIX E

Employee Interview Guide--Semi-Structured Format

Employee Name:________________________________________  Date:____________

A. Review of Research Project
   a. Purpose of study
   b. Consent to audio-recording
   c. Explanation of transcript review process (member checking)

B. General background information
   a. Tell me a little about your professional background.
   b. How long have you been in your current position?
   c. What are your primary duties and responsibilities?
   d. For VP & Manager: Also, what are the primary duties and responsibilities of the generalist?

C. RQ1) What is the domain of knowledge that generalists operating as a community of practice share with one another?
   a. Tell me about the topics/subjects, which generalists are the experts in, that support students in the development of college knowledge?
   b. Why are generalists considered the experts instead of another position within the college?
   c. How do generalists demonstrate commitment to being the experts in the topic/subject?

D. RQ2) How do generalists operating as a community of practice learn together through cross-training and other social learning activities?
   a. What activities do generalists use to expand their understandings about how to support students in the development of college knowledge?
   b. How do these activities expand understandings and build collective knowledge?
   c. What observations of other generalists in their work have expanded your understandings about how to support students in the development of college knowledge?
   d. Who among the generalists helps you the most expand your understandings about how to support students in the development of college knowledge? Why?
E. RQ3) How do generalists operating as a community of practice contribute to developing students’ college knowledge?
   a. How have new understandings influenced work related to supporting students' development of college knowledge? Why?
   b. How are new understandings and/or changes in processes or policies recorded?

F. Wrap-Up of Interview
   a. Is there anything else you would want to share about the generalists' expertise, learning activities that build collective knowledge, or the application of new understandings to support students in the development of college knowledge?
   b. Thank you!

G. Ask if any final comments or questions
APPENDIX F

Enrollment Handout: Steps to Become a Midwest Community College Student

Step 1. Complete an online application

- Provide a copy of your state-issued ID.
- Fax: 123.456.7890 or email: admissions@midwest.edu

Step 2. Financial Aid

- Complete the Free Application for Federal Student Aid.
- Get information on scholarships and loans.

Step 3. Transcripts

- Send in your high school transcript if you have graduated in the last three (3) years.
- Send official college transcript only if you are requesting a transfer credit evaluation toward a Midwest degree.
- If you do not have transcripts, you will need to take course placement.

Step 4. Course Placement

Course placement assesses your skill level in writing, reading, tech literacy, and math to ensure your success. Course placement may not be needed if...

- you took the ACT/SAT within the last three (3) years.
- you successfully completed math and English at a previous college or
- you plan on taking a Midwest course for personal interest or audit only.

Step 5. New Student Orientation

- Once you have completed all the required steps to admissions, you will receive an acceptance letter.
- This letter will provide details on how to reserve your new student orientation time. At orientation you will meet with an advisor to discuss courses to register for.

Step 6. Registration

Once you have completed all the above steps to admissions and have attended orientation, you will be able to register for classes.

Student Services is open from 8 a.m. to 6 p.m., Monday through Thursday, and Friday from 10 a.m. to 5 p.m. If you have any questions, please contact us at 123.456.7890 or e-mail: admissions@midwest.edu.
APPENDIX G

Student Withdrawal Form: Statements of Understanding

____ I understand there will be no refund for the course(s) withdrawn.
____ I understand that I will receive a “W” on my transcript for each course I withdraw from.
____ If I am a XYZ scholarship student, I understand that I must be actively enrolled in 12 credits. A “W” is not active enrollment.
____ I have discussed options such as tutoring or working with the instructor.
____ I have reviewed Midwest Community College publication on withdrawing from courses.
____ I have spoken with Midwest Financial Aid, any third-party payee, and my insurance carrier, if applicable and understand the consequences of dropping a course(s), which are:

If I do not complete this semester with a cumulative financial aid GPA of 2.0 or better and successfully complete 67% of my courses, I may lose or jeopardize my financial aid for next semester. Withdrawals and Incompletes count as 0.0 for financial aid calculation. My grades in other courses must be high enough to make up for the withdrawals. It may not be enough to make up for the withdrawals. I may not be eligible for scholarships or loans for the next semester. If I am currently on academic probation and do not successfully complete these classes with a 2.0 GPA and 67% completion rate, I will be placed on academic suspension and not be eligible for financial aid during the next semester I attend.

If I am receiving Title IV (Federal Funds) financial aid, and I withdraw from all of my classes during the first 60% of the semester, I will be subject to an adjustment of Title IV Funds. This U.S. Department of Education calculation may result in me owing money to Midwest Community College. The return of Federal Title IV Funds will be in the following order: Federal Unsubsidized Stafford Loan, Federal Subsidized Loan, Federal PLUS, Federal Pell Grant and Federal Supplemental Educational Opportunity Grant. This means I will owe money.

Authorization: I authorize Midwest Community College to withdraw me from the course selections listed above, and accept full responsibility for any tuition charges based on the accuracy of the information presented. I understand that there is no tuition refund given for withdrawn courses and a grade of “W” will appear on my transcript. I am responsible for understanding how my withdrawal from classes will affect my financial aid status. Additionally, any balance owed to the College must be paid prior to enrolling in a future semester.

Signature ________________________________ Date __________________

Revised 11/29/10
Appendix H

Copyright Permission Communication

--------------------------- Original Message ---------------------------

Subject: RE: Permission/Copyright
From: Director of Research at Midwest Community College
Date: Tue, December 23, 2014 10:51 am
To: "Cheryl Warmann" <cwarmann@oakton.edu>

Good morning Cheryl,

Thanks for reaching out to us and please forgive me for taking so long to get back to you.

You should feel free to use the image that you sent to us in your dissertation so long as you promise to follow the conditions that you outlined in your email to us. In return I would only ask that you share a copy of your dissertation with me once it is finished.

Many thanks and good luck with your work.

-----Original Message-----

From: Cheryl Warmann [mailto:cwarmann@oakton.edu]
Sent: Tuesday, December 16, 2014 2:34 PM
To: Director of Research at Midwest Community College
Subject: Permission/Copyright

I am hoping one of you can help me. In 2013, I gathered qualitative research at your institution for my dissertation on the one-stop student service model. My last visit was just about the time the VP left so I'm pretty sure I haven't met you.
I am working on the final text, my adviser has recommended I included a floor plan as part of my contextual chapter. I would like to include the plan/image located on your website. The image does not include the name of your institution. I refer your institution as Midwest Community College throughout my dissertation in order to protect the privacy of the participants.

Do you know how I can use this image without violating copyright law?

My dissertation needs to be published in dissertation abstracts in order to meet graduation requirements and I expect the image will only appear in the full copy. If I write an article with my adviser, this level of detail would not be included.

Thank you for your consideration. Please let me know what questions you might have.

Cheryl Warmann

Graduate Student at the University of Illinois at Urbana-Champaign and Enrollment Services Director at Oakton Community College