

HIGH-TOUCH AND HIGH-TECH? COMMUNITY COLLEGE ADVISORS'
PERCEPTIONS OF INTEGRATING TECHNOLOGY
INTO QUALITY ACADEMIC ADVISING

By

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To my husband, Marc, for his endless love and support

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Abstract of Dissertation Presented to the Graduate School
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By

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The purpose of this study was to explore advisors' perceptions of integrating technology into quality academic advising. Interviews conducted with six community college advisors from across the United States focused on (a) how advisors define and operationalize quality academic advising and (b) how they use technology for quality academic advising.

Initial data analyses followed Moustakas' (1994) methods for transcendental phenomenological analysis followed by open coding processes as described by Creswell (1998). Findings were presented in two ways. First, the advisor profiles provided in-depth descriptions of each advisor's experiences including her organizational context, primary responsibilities, beliefs about advising, and technology use in advising. Then the overarching themes within experiences across advisors were provided.

This study found that the high-touch profession of academic advising is being impacted by advisors' and students' reliance on technology resulting in a new component critical to providing quality academic advising: fostering student

independence through empowering practices. A discussion of the findings as related to previous research literature, implications for advisors and administrators, and recommendations for future research are included.

CHAPTER 1 INTRODUCTION

Higher education has long been looked at as the key to success, but is under the microscope like never before. Referenced as the central component of the United States' long-term economic growth and global competitiveness, postsecondary institutions must meet the college completion goals set forth by President Obama (McPhail, 2011; U.S. Department of Education, 2011). According to Georgetown University's Center on Education and the Workforce, 63% of jobs will require a bachelor's degree by 2020 (Carnevale, Smith, & Strohl, 2010). By 2018, high school graduates (as well as high school dropouts) will largely find themselves limited to three areas of employment: food/personal services, sales/office support, and other blue collar occupations (Carnevale et al., 2010). Institutions of higher education face not only the challenge of enrolling more students but of helping those students stay enrolled and be successful in order to reach the national completion goals (Advisory Committee on Student Financial Assistance, 2012).

Community colleges play a critical role in reaching those goals because they enroll nearly half (45%) of all undergraduate students in the U.S. (AACC, 2013a). With vastly different missions and student populations than their university counterparts, community colleges provide affordable access to career preparation and higher education (AACC, 2013a; Sullivan, 2007). While the number of traditional college students enrolling at community colleges is increasing (Mullin, 2012), the majority of students enrolled at community colleges have at least one nontraditional characteristic (AACC, 2013a; Choy, 2002). According to the U.S. Department of Education (1996), nontraditional characteristics include delayed enrollment into postsecondary education,

part-time enrollment, financial independence, full-time employment, supporting dependents, single parenthood, and not obtaining a high school diploma or equivalent. These characteristics often become barriers to success (AACC, 2013a; Mullin, 2012) making access and availability of support services, such as academic advising, essential in maximizing students' chances of achieving their academic goals.

Academic Advising

As noted by Hunter and White (2004), academic advising is “perhaps the only structured campus endeavor that can guarantee students sustained interaction with a caring and concerned adult who can help them shape a meaningful learning experience for themselves” (p. 20). Academic advisors are often the first and only ongoing contact between students and institution throughout students' academic tenure. Whether or not students' academic advising needs are met plays a large role in their decision to stay enrolled (Noel, 1978). Tinto's (1975; 1999) theory of student departure identified three major reasons students leave institutions of higher education: academic difficulties, inability to resolve their occupational and educational goals, and failure to become or remain incorporated in the intellectual and social life of the institution.

While negative experiences can result in students leaving the institution, positive experiences, including quality academic advising, can lead to students investing more in the college experience (Pascarella & Terenzini, 1991). According to a study conducted by AcademicMAPS, ineffective customer service accounts for 84% of all reasons cited by students for leaving a college (Raisman, 2012). Habley (2004) reported similar reasons for student attrition and concluded “one of the primary factors affecting college retention is the quality of interaction a student has with a concerned person on campus”

(p. 16). Advisors are those concerned people and academic advising is critical to retention (Crockett, 1978; Cuseo, 2003; Glennen, 1996; Metzner, 1989; Tinto, 1999).

Advisors provide students with ongoing encouragement from admission to graduation by guiding students in their selection of an academic program, recommending resources, providing referrals to specialized services, anticipating roadblocks, and helping students navigate the pathway to success. Advisors help students create a plan to keep them focused on their goals and provide valuable information and recommendations on a wide range of topics that assist with academic and transfer success.

As diverse as the students they serve, advisors are unique in their approach to each student interaction. Advisors approach academic advising with a unique skillset based on their education and experience. As a result, no two advising sessions are exactly alike. Advisors typically receive ongoing training to keep up to date on programs, policies, and other institutional information. However, advisors rarely receive training on the act of advising (Koring, 2005).

Quality Academic Advising

According to Light (2001), “good advising may be the single most underestimated characteristic of a successful college experience” (p. 81). But just what does good, or quality, academic advising look like? According to Allen and Smith (2008), quality academic advising requires skills in the following five domains:

1. integration of the student’s academic, career, and life goals;
2. referral to campus resources;
3. information about degree requirements and institutional policies and procedures;
4. individuation with consideration of students’ individual characteristics;

5. and shared responsibility for helping students develop planning, problem-solving, and decision-making skills. (p. 609)

Similarly, Smith (2005) emphasizes the benefits of creating personalized relationships with students and provides advisors with a framework that includes nine components of personalization: prepping, attending, bonding, disclosing, laughing, counseling, normalizing, coaching, and continuing.

Quality academic advising takes students' feelings of "being cared about, treated in a caring way, and valued as an individual" into account (Cheng, 2004, p. 216).

Ongoing advisor development through training and professional development, iterative program evaluation, and assessment of advisor effectiveness with rewards and recognition for outstanding performance are critical components of the infrastructure required for quality academic advising (Hunter & White, 2004). Other characteristics of quality advising programs include well-articulated mission statements upheld by clear standards and guidelines, active leadership, appropriate staffing, and supportive technology (Hunter & White, 2004).

Technology in Academic Advising

Academic advising does not occur in a vacuum; the connectedness of students permeates all aspects of higher education, including academic advising. Traditional undergraduates today have grown up in a digital environment, relying on technology to interface with the world around them. How is technology integrated into quality academic advising? Advisors who use technology seek to address some of the common problems students encounter with advising services, including the lack of accessibility/availability of advisors, timely and accurate information, and adequate time due to large caseloads (Habley, 1993). From a technology-agnostic perspective, the

technology itself is of little importance; it is what the technology lets the advisor do that is important (Heiberger & Harper, 2008). According to Heiberger and Harper (2008), to effectively communicate with students and provide the support they need, “student affairs professionals must embrace and explore new technologies” (p. 32).

Effective advisors incorporate technology while maintaining strong interpersonal relationships with their students (Multari, 2004). The efficiency gains brought about by early technological advancements, including the widespread acceptance of computerized audit systems and student databases, are now taken for granted (Habley, 2004). In a time when advisors are asked to do more with less, technological solutions are being considered to increase students’ access to information and interaction with their advisor (Multari, 2004). These technological solutions include the use of asynchronous communication tools, such as email and learning management system messages, and synchronous communication tools, such as instant messaging, video conferencing, and social networking, to communicate and interact with students (Gordon, 2006; Habley, 2004). Some advisors find synchronous chat using social networking sites, as well as use of their private messaging tool, more effective than email communication (Soto, 2000; Traxler, 2007).

Technology allows rudimentary tasks to be automated and lets advisors invest their time and efforts in mentoring students by interacting personally with them (Hunter & White, 2004; Multari, 2004). Integrating technology allows advisors to connect with students, provide current resources, and offer support in multiple ways. According to Steele and Carter (2002), electronic communication technologies help advisors provide quality academic advising despite repetitive requests from students. For example, print

resources formerly provided upon inquiry can be replaced with frequently asked question webpages and template email responses.

Leaders in the field of academic advising stress the importance of balancing technology with personalized interaction (Gordon, 2006; Habley, 2004; Hagen, 1994; Hemwall & Trachte, 1999; Hurt, 2007; Lowenstein, 2005; Multari, 2004; Ryan, 1992; Soto, 2000). The Technology in Advising Commission of the National Academic Advising Association (NACADA) endorses the use of social media in advising with particular reference to the importance of maintaining secure exchanges of information in compliance with the Family Educational Rights and Privacy Act of 1974 (NACADA, 2005). Social media are “a collection of Internet websites, services, and practices that support collaboration, community building, participation, and sharing” (Junco, Heiberger, & Loken, 2010, p. 119). They provide a venue for communication with students that are effective because students spend time on these sites as part of their daily routine (Ellison, Steinfield, & Lampe, 2007; Wiley & Sisson, 2006).

Problem Statement

Academic advising is currently experiencing a paradigm shift. What has always been considered a high-touch, face-to-face profession is being impacted by advisors' and students' use of technology. Traditionally, to be effective in their roles, academic advisors have needed to hone skills, such as attending and providing supporting non-verbal cues (Hunter & White, 2004; Smith, 2005). Today, academic advisors have also needed to become literate, if not proficient, in technology as well to remain relevant and effective. How is this need changing community college advisors' philosophy of quality academic advising and how are advisors using technology to operationalize that philosophy through their daily practices?

Purpose

Research on academic advising has typically focused on students' satisfaction with, preferences for, and attitudes toward services received (Andrews, Andrews, Long, & Henton, 1987; Fielstein, 1994; Lowe & Toney, 2000; Smith, 2005; Trombley, 1984; Winston & Sandor, 1984). Other research efforts have focused on the relationship between academic advising and institutional retention (Beal & Noel, 1980; Metzner, 1989). However, a growing number of recent studies focus on advisors' perceptions of academic advising (Allen & Smith, 2008; Barnes & Austin, 2009; Harrison, 2009; Murrell, 2005; Willis-Haslip, 2011; Wyatt, 2006). Some studies focus on the unique perspectives of community college advisors and the challenges they face (Bracken, 2004; Mikluscak, 2009; Solis, 2012). While these studies help fill in the gaps within the academic advising research literature by focusing on the providers rather than on the recipients of academic advising, a greater understanding is still needed (McGillen, 2000). Given the important role open-access institutions play in 21st century higher education, practitioners and leaders alike will benefit from research efforts focused on academic advising in community colleges. This study answered that call for research by exploring the profession from a fresh perspective.

This qualitative study explored academic advising through the community college advisors' eyes by investigating how the advisors define and operationalize quality academic and how they use technology for quality academic advising. The following research questions guided this study: In what ways, if any, is technology integrated into quality academic advising in the context of community college advisors' philosophy and definition of quality academic advising? a) What are advisors' perceptions of quality academic advising? b) How are advisors currently using technology in quality academic

advising? c) What are advisors' perceptions of using technology in quality academic advising? d) What do advisors consider to be best practices for integrating technology into quality academic advising?

Research Design

Transcendental phenomenology, or the descriptive study of how a person experiences a phenomenon (Husserl, 1970; Moustakas, 1994), served as the research design for this qualitative study. The researcher was the primary instrument for data collection and data analysis. One-on-one, in-depth, semi-structured interviews were used to collect the rich data necessary to answer the research questions (Glesne, 2006; Spradley, 1979). When necessary, probing was used to explore responses in more depth (Glesne, 2006; Merriam, 2002; Spradley, 1979).

Assumptions

Given the qualitative approach of this study, several assumptions must be noted. Glesne (2006) asserts that reality is a socially constructed phenomenon, making the measurement of certain variables complex. Such complex variables are subject to certain interpretive elements and, therefore, reality can be influenced by the context of the study and the researcher's biases (Creswell, 1998; Glesne, 2006; Merriam, 2002).

It is assumed that all advisors interviewed for the purposes of this study provided an honest and forthright description of their experiences with and perceptions of integrating technology into their professional practices. This study focused on the perceptions of advisors at community colleges across the U.S. These distinct open-access settings provide the context within which the advisors work and may have influenced their perceptions. Additionally, the diversity in educational background and professional experience of the advisors may have affected their responses.

While the researcher made all attempts to remain objective by creating a subjective distance, her personal biases and professional experiences as an academic advisor may have influenced the data collection and analyses of this study. Her subjectivity statement is provided in Chapter 3. She is a faculty counselor at Indian River State College (IRSC) with eight years of academic advising experience.

Professional Practice Context

IRSC is on the Treasure Coast of Florida and has an enrollment of over 32,000 students. Comprised of five full-service campuses, IRSC is regionally accredited by the Southern Association of Colleges and Schools to award bachelor and associate degrees as well as technical certificates and applied technology diplomas. Over 70% of the region's college-bound high school seniors attend IRSC following graduation. With an equal-access and open-door admission policy, "IRSC is committed to advancing the educational, cultural, career training, workforce, and economic development of its surrounding area" (IRSC, 2012, para. 1).

IRSC assigns all degree-seeking and dual-enrollment students an academic advisor once they are admitted. Academic advisors are responsible for creating individualized advising plans, which include all required and elective coursework necessary for degree completion, for their assigned students. Advisors use synchronous and asynchronous communication, including phone, email, and letter mailings, to contact and interact with their students. Advising is done on a walk-in and appointment basis with walk-in advising traffic dramatically increasing during peak registration periods.

As a faculty counselor at IRSC, the researcher is interested in experimenting with the use of technology in academic advising and is therefore seeking to study what is

best practice. Having been unable to identify such best practices in the research literature, she decided to focus this study on finding out from other advisors what they consider to be best practice. However, because best practices are often based on their congruence with an advisor's particular philosophy as well as institutional model of advising, it is critical to understand advisors' philosophies of academic advising and their organizational contexts simultaneously. This will allow the researcher to use what she learns in her own professional practice.

Significance

Community colleges offer a multitude of educational opportunities ranging from English proficiency and adult education to workforce preparation and degree programs. As a result, advising at community colleges is vastly different from advising at universities. The key difference is the community college's student population—"predominantly first generation, commuter, underprepared, and diverse in all ways including age, ethnicity, ability, and socioeconomic background" (King, 2002, para. 2). Advisors who provide quality academic advising have a positive effect on student retention and success. To provide quality advising to such a diverse student population, community college advisors increasingly rely on technology to more effectively manage their workload and increase their efficiency. As a result, there is a need to determine how advisors' definition of quality academic advising is being affected by their reliance on technology and how this is translating into their professional practices.

The critical role community colleges play in meeting the national completion goals provides the impetus for investigating academic advising in the community college setting. By exploring how advisors define quality academic advising, use technology, and describe best practices, this study's findings have implications for practice. To

inform modern advising practices, this study explored advisors' perceptions of integrating technology into quality academic advising with the aim of identifying best practices.

Advisors are primary stakeholders in the academic advising process and their opinions matter. These opinions are shaped by personal experiences and the climate within which they work. By focusing on the providers of academic advising, this study provided practicing professionals with an opportunity to share their expertise, opinions, and motivations. When practicing professionals are active participants in making decisions that affect business practices, they feel valued and appreciated. This sense of empowerment can have direct, positive impact on the quality of services provided by translating into advisors' daily interactions with students. Often advisors are so busy advising that they do not take the time to reflect or study their own professional practice. The qualitative approach of this study provided advisors with the opportunity to self-reflect on their education, training, evaluation, and other processes associated with their professional roles.

Overview

This study is divided into five chapters. The first chapter introduced the study's problem statement, purpose, and significance. Chapter 2 contains the theoretical framework as well as a review of relevant research literature. Methodology, including the data collection and analysis methods, are presented in Chapter 3 and Chapter 4 contains the results. The final chapter, Chapter 5, includes a discussion of the results and implications for policy, practice, and future research.

CHAPTER 2 LITERATURE REVIEW

Quality academic advising plays a vital role in student retention and can positively impact students' academic success (Beal & Noel, 1980; Dirr, 1999; Fishback, Kasworm, & Polson, 2002; Metzner, 1989). However, community college advisors face the challenge of trying to provide quality academic advising to a diverse student body that increasingly uses technology to interact with the world around them. Before exploring community college advisors' perceptions of integrating technology into quality academic advising, it is important to review the history of and previous research on academic advising.

This chapter discusses literature in the field of academic advising. The first section introduces the history of community colleges and academic advising. National Academic Advising Association details the development of NACADA and its goals for advising and its statement of core values. Academic Advising Defined includes a formal definition of academic advising as in this study and provides an overview of the various structures, theories and approaches to academic advising. Theoretical Framework presents an overview of relevant student development theory that is the theoretical framework for this study. Serving a Diverse Student Body provides descriptions of the diverse student body advisors work with daily basis. Academic Advising Research summarizes previous research in academic advising relevant to this study, followed by Technology in Academic Advising, a section that focuses on technology implementation. This chapter concludes with Gaps and Lingering Questions, a section addressing any noted gaps in the research as well as explaining lingering questions remaining upon review of the relevant research literature.

Access to the University of Florida's library resources through Virtual Proxy Network allowed multiple databases to be searched at one time. Using ERIC via Wilson Web, multiple databases, including Education Full Text, Education Index Retro, Omnifile Full Text Mega, and Social Sciences Full Text, were searched at one time. Searches used key terms such as "student support services" and "academic advising" to produce a list of references with which to start the review. Search results were then narrowed to also include "educational technology" and "technology" to produce results focused on both academic advising and technology. Once a list of applicable sources was identified and reviewed, each article's individual reference list then served as a guide for additional resources to review pertinent to the research topic. Recent dissertations related to academic advising were also found and reviewed using ProQuest Dissertations and Theses database.

Historical Overview

The Community College

With the percentage of those graduating from high school expanding from 5% in 1910 to 45% in 1960, so did the demands for access to higher education (Cohen & Brawer, 2002). Instead of increasing universities' capacities to accommodate this growth, several educational leaders supported the idea of separating general education from the research university context and conceptualized a system where universities would be free from the task of teaching first- and second-year students. Junior colleges were the result of this conceptualization.

With its beginnings in 1901 as Joliet High School, Joliet Junior College (JCC) is largely recognized as the first public community college (AACC, 2013b; Bragg, 2001; Brint & Karabel, 1989; Witt, Wattenbarger, Gollattscheck, & Suppiger, 1994). JCC was

the vision of William Rainey Harper, president of the University of Chicago. Harper, along with other university leaders, brought this vision to fruition by partnering secondary and higher education.

The number of junior colleges continued to grow for the next ten years. Other small, religious colleges aligned their curriculum with the concept of these junior colleges schools by dropping their upper-division offerings. In 1921, the American Council on Education (ACE) prescribed a list of standards pertaining to admissions, degree requirements, faculty credentials, curriculum, enrollment, facilities, and the requirements for oversight by an accrediting agency for the 207 junior colleges now in existence across the U.S. (Rodkin, 2011; Witt et al., 1994). ACE defined a junior college as “an institution of higher education which gives two years of work equivalent in prerequisites, scope, and thoroughness to the work done in the first two years of a college as defined elsewhere by the Council” (Witt et al., 1994, p. 90). That same year the American Association of Junior Colleges was established to provide a forum for two-year colleges (AACC, 2013b). All five regional accreditation associations accepted junior colleges as members, thus establishing the credibility and transferability of credits to their upper-division institutions (Rodkin, 2011).

While the original intent of junior colleges was to prepare students for transfer, early junior college leaders called for an expansion of mission to include vocational education to prepare students for employment (Bragg, 2001; Brint & Karabel, 1991). In 1946, President Harry Truman ordered a report on the condition of American higher education. The resulting *Higher Education for American Democracy Report*, commonly referred to as the *Truman Commission Report*, argued for substantial change in

postsecondary education including the establishment of a community college network focused on “gearing its programs and services to the needs and wishes of the people it services” (Zook, 1947, p. 70). Consequently, many junior colleges began offering adult, developmental, and vocational education opportunities. This report also suggested a name change from junior college to community college to reflect the more comprehensive mission. By 1957, there were 652 community colleges across the U.S. (Witt et al., 1994).

Today’s comprehensive community colleges continue to fulfill their missions of low-cost access to postsecondary education and career preparation. There are nearly 1,000 public community colleges in the U.S. today that serve a diverse population totaling 13 million students with tuition rates less than half those of four-year colleges (AACC, 2013a). A vital part of the higher education system, community colleges provide preparation for transfer to four-year institutions with remediation when necessary, open access to workforce development and skills training, as well as non-credit offerings including English as a second language and adult education (AACC, 2013a). Without community colleges many students would become academically and professionally stagnant.

Academic Advising

Understanding the historical context of academic advising is important because “an appreciation of the past is an important key to moving academic advising through the next millennium” (Gillispie, 2003, para. 8). In the late 1820s, Kenyon College established the first known formal system of advising. Students were paired with faculty members responsible for serving as their advisors (Habley, Bloom, & Robbins, 2012). Much of the advising was provided in a prescriptive manner, leaving students little room

to deviate from the established curriculum. This faculty-based model continued for most of the 19th century until institutions' moving to a more flexible and diverse curriculum warranted a change. Students gained the freedom of choosing elective courses based on areas of interest, but were not knowledgeable enough to make informed decisions (Frost, 2000).

As the postsecondary curriculum became more diverse during the 20th century, so did the need for advising and counseling (Frost, 2000). Campus psychologists, chaplains, and upper-division students took on the role of advisor during this time. After World War I, Personal/Psychological, Career/Vocational, and Academic Advising emerged as the three areas of specialized advising. During this time counselors were trained to work with faculty to address the psychological and vocational needs of veterans (Cook, 2001). After World War II, college and university enrollment increased substantially as a result of the G. I. Bill (Bragg, 2001; Cook, 2001; Frost, 2000; Rodkin, 2011). That increase in enrollment resulted in the need for specially trained student personnel professionals, a newly coined term, to assist students with the challenges associated with transitioning to the college environment and navigating the diverse offerings in curriculum (Cook, 2001; Frost, 2000; Gillispie, 2003).

According to Habley and his colleagues (2012), a series of events propelled academic advising to the forefront of higher education beginning in 1970. First, recommendations from the Carnegie Commission on Higher Education placed a greater emphasis on improving enrollment and graduation rates through enhanced academic advising programs and services (Cook, 2011; Habley et al., 2012). Second, community colleges experienced a surge in enrollment among first-generation and low-income

students. Third, two seminal articles (Crookston, 1972; O'Banion, 1972) highlighting the importance of academic advising and defining various approaches were published. This series of events solidified academic advising as an essential component of the strategy for addressing enrollment and persistence issues in American higher education.

National Academic Advising Association

Known as the premier professional organization for academic advisors and their professional development, NACADA was established in 1979 “to promote the quality of academic advising in institutions of higher education” (Beatty, 1991, p. 5). NACADA’s (2005) Statement of Core Values provides a framework to guide professional practice and states that advisors are:

responsible to the individuals they advise, responsible for involving others, when appropriate, in the advising process, responsible to their institutions, responsible to higher education, responsible to their educational community, and responsible for their professional practices and for themselves personally. (Declaration section, para. 1)

In addition to its core values, NACADA and the Council for the Advancement of Standards (CAS) created goals for academic advising, which have remained unchanged since 1980 (CAS, 2008). In accordance with these goals, academic advisors should help students gain a better self-understanding and accept who they are. A primary goal of academic advising is to help students understand the world of work and to begin to think about where they see themselves fitting into it. This requires thoughtful consideration of personal interests, skills, abilities, and values. Once a career goal is in place, advisors should help students develop an educational plan to help them reach that goal. Advisors should also help students develop decision-making skills. It is of primary importance for advisors to provide accurate information about

institutional policies, procedures, resources, and programs to students with referral to such resources when necessary. Advisors should help students evaluate their progress toward their previously established goal and serve as an ongoing contact through the students' academic tenure at the institution (CAS, 2008).

By establishing goals and core values for academic advising, NACADA has operationalized the term academic advising, allowing it to be systematically studied (Habley, 2000). While these goals and core values are encouraged to remain at the forefront of professional practice, advisors use various approaches when advising students.

Academic Advising Defined

NACADA (2005) defines academic advising as a “series of intentional interactions with a curriculum, a pedagogy, and a set of learning outcomes” (Summary section, para. 1). Academic advising goes beyond reviewing graduation requirements; it takes into account students' individual and unique experiences, achievements, and goals in order for their learning and development to transcend the classroom and campus boundaries (NACADA, 2005). Habley (2004) noted that effective academic advising included these factors:

- Advising program must be compatible with the institutional organizational structure and student needs.
- A specific individual must be designated by the institution to direct or coordinate the advising program.
- The institution must have a clear written statement of philosophy for academic advising that includes program goals and sets forth expectations of advisors and advisees.
- Only personnel who have received systematic skills training should offer advising.

- There must be systematic and regular research on and evaluation of the overall academic advising program.
- Only personnel whose performance is systematically evaluated should offer academic advising.
- Only personnel who are rewarded for skillful performance should offer academic advising. (pp. 43-44)

Organizational Structures

An institution's organizational structure is the foundation of the way advising services are delivered to students. The organizational structure is critical to the overall success of any academic advising program. Structures are categorized as centralized, decentralized, or shared. The selection of an organizational structure is usually based on institutional factors, such as enrollment, administrative structure, faculty participation, academic policy, institutional mission, as well as specific characteristics of students served (Gordon, Habley, & Grites, 2008; Pardee, 2004).

Centralized. In a centralized structure, advisors are housed under one administrative unit. This structure can include faculty and professional advisors, but typically mainly includes the latter. A commonly used centralized structure is the self-contained advising center where all advising occurs in an advising center staffed primarily by professional advisors. This structure is the most commonly used at community colleges (Gordon et al., 2008; King, 2002; Pardee, 2004).

Decentralized. In a decentralized structure, advising is spread out across the institution based on major and department. The faculty-only approach is a prevalent decentralized structure found at two- and four-year institutions. Students are assigned an advisor within the department of their academic discipline (Gordon et al., 2008; Pardee, 2004).

Shared. A combination of the centralized and decentralized structures, a shared structure relies on both faculty and professional advisors sharing their respective expertise to provide academic advising services. Supplementary and split are the most common shared structures. In supplementary structures, there is a central administrative unit within the academic department with professional staff to support the faculty advisors. In split-model structures, faculty advisors and professional staff advisors split the responsibility of providing advising services to students. Students are first assigned to a professional advisor, usually on the basis of special criteria, such as class-standing or major, and then are assigned a faculty advisor once they have declared their major and met all required prerequisite coursework (Gordon et al., 2008; Pardee, 2004).

Theories and Approaches

In addition to the various organizational structures an institution uses, multiple approaches to academic advising guide advisors' daily practices. Approaches are not mutually exclusive and often an advisor will use different, even multiple, approaches based on the individual and on the current needs of the student. Each advising session is as unique as each student.

Developmental. Crockett (1978) conceptualized a definition of academic advising that focused on the relationship and interaction between advisor and student and called it developmental academic advising. Developmental academic advisors focus on all aspects of students' lives, taking a holistic approach to advising. Vastly different from the prescriptive approach (defined in the next section), Crockett (1978) defines developmental academic advising as:

a developmental process, which helps students clarify their life/career goals and develop educational plans for the realization of these goals. It is a decision-making process by which students realize their maximum educational potential through communication and information exchanges with an advisor; it is ongoing, multifaceted, and the responsibility of both student and advisor. The advisor serves as a facilitator of communication, a coordinator of learning experiences through course and career planning and academic progress review, and an agent of referral to other campus agencies as necessary. (pp. 248-249)

In developmental academic advising, the advisor serves as a facilitator of learning and development rather than the sole provider of information (Gordon et al., 2008).

O'Banion's (1972) definition of academic advising has developmental qualities and, while similar to Crockett's (1978), focuses on the relationship between advisor and student to a greater degree. O'Banion suggests that "advising is a process in which advisor and advisee enter a dynamic relationship respectful of the student's concerns and the advisor serves as teacher and guide in an interactive partnership aimed at enhancing the student's self-awareness and fulfillment" (O'Banion, 1972, pp. 62-63).

O'Banion's (1972) five-stage paradigm for academic advising, also known as the five stages for the community college advising process, first focuses on students' explorations of life goals (Stage 1) and then on their exploration of vocational and career goals (Stage 2). Once this exploration has been completed, the advisor then assists the student accordingly with the choice of an academic program (Stage 3) and course selections (Stage 4). Ultimately the advisor helps the student develop a schedule of courses (Stage 5) based on availability and options by teaching the student the registration mechanics. Once students have investigated the first two elements, exploration of life goals and exploration of vocational/career goals, in great detail, they can then continue toward choosing a program (O'Banion, 1972).

This linear model depicts the developmental advising process as a step-by-step process where students have to progress gradually only after self-reflection and thought. Once the advisor understands the student's goals, he or she can then provide specific program advisement, including curriculum requirements and sequencing. This ultimately leads to the student's learning the mechanics of the course registration process. O'Banion (1972) addresses the potential for students to select inappropriate majors and courses in which they lack actual interest. This can occur without prior reflection and can lead to students continually changing programs or even dropping out of the institution. Developmental academic advising is time consuming and, although beneficial, advisors find it difficult to consistently use a developmental approach due to large caseloads.

Prescriptive. Prescriptive advising, as opposed to developmental advising, is based on the traditional authoritarian role of the advisor rather than the relationship between advisor and student (Crookston, 1972; Gordon et al., 2008). In prescriptive advising sessions there is a one-directional flow of information from advisor to student where the student acts as a passive receiver of information (Fielstein, 1994). Discussions mainly focus on degree requirements and course selections. As the name indicates, the advisor prescribes a set course of action or steps for the students to follow to help them reach their academic and professional goals. According to Fielstein (1994), developmental advising and prescriptive advising are not mutually exclusive; rather, she argued that once the prescriptive foundation is in place a developmental relationship could follow. She asserted it is the balance between prescriptive and developmental approaches that students prefer.

Proactive (Intrusive). In a proactive (formerly known as intrusive) advising approach, the advisor seeks out the student instead of waiting for the student to seek out academic advising. This proactive approach requires that students meet with their advisor either at predetermined points throughout the term or as a result of another trigger, such as notification of non-attendance from an instructor or poor academic performance. Proactive advising has been linked to higher grade point averages and greater rates of retention among at-risk student populations (Glennen, 1996; Gordon et al., 2008).

Appreciative. Understanding that students have had previous successes in their lives, the appreciative advising approach is student-centered and consists of six stages: disarm, discover, dream, design, deliver, and don't settle. This approach is based on the theory of appreciative inquiry and positive psychology. Advisors ask positive, open-ended questions that help students envision future academic and professional success based on realizing and optimizing their strengths (Bloom, Hutson, & He, 2008).

Theoretical Framework

Prevalent student development theories serve as the theoretical framework for this study. Astin's (1984) theory of student involvement, Chickering's (1969) seven vectors of student development, and Tinto's (1975) academic and social integration model have long guided research in academic advising. The overlapping ideas and concepts regarding the role of quality academic advising in student retention, persistence, and success between these theories provide a perfect lens through which to focus this study.

The relationship developed and the interaction between advisor and student are a form of student involvement (Ender, Winston, & Miller, 1982). Student involvement is defined as “energy devoted to the academic experience” (Astin, 1984, p. 297) where students’ time is viewed as a resource that has to be allocated among multiple commitments. Advisors are faced with the challenge of finding a “hook to stimulate involvement” (Astin, 1984, p. 304) so that more time is allocated to institutional-related activities. By providing quality academic advising through personalized interaction, advisors help establish the bond between the student and the institution.

Throughout students’ college experience, they experience a developmental process that propels them toward developing a sense of identity (Chickering, 1969). Chickering’s (1969) psychosocial student development theory includes seven vectors that illustrate students’ emotional, social, physical, and intellectual development in the college environment. In 1993, Chickering revised the theory with another student affairs professional, Reisser, to reflect these vectors: developing competence, managing emotions, moving through autonomy toward interdependence, developing mature interpersonal relationships, establishing identity, developing purpose, and developing integrity (Chickering & Reisser, 1993). According to Habley (1993), three of the seven vectors are essential for academic advising: developing competency, developing autonomy, and developing purpose.

The competence development vector pertains to intellectual, physical, and interpersonal attributes. These attributes are based on students’ abilities to use their mind to experience the world around them, use their body to achieve strength and fitness through self-discipline, and use their listening skills to function in different

relationships. The autonomy-toward-interdependence vector pertains to moving toward reliance on one's self as opposed to reliance on others to solve problems as well as putting solutions into action. Last, the purpose-development vector focuses on an individual's reason for attending college based on career goals, familial commitments, and personal aspirations. The key is to develop the ability to balance the personal, career, and outside commitments and goals in order to maintain productivity and forward movement toward these goals (Chickering, 1969; Chickering & Reisser, 1993).

Quality academic advising helps students develop the ability to balance their personal, career, and outside commitments so as to maintain productivity and progress toward their academic and career goals. According to Tinto's (1975) model of academic and social integration, the students' likelihood of persisting toward those goals is largely based on how well they are integrated into the institution. Tinto (1987) advocated for institutional commitment to preventing students from experiencing incongruence and isolation – two factors linked to a lack of social integration. In an occasion of incongruence, "individuals perceive themselves as being substantially at odds with the institution" (Tinto, 1987, p. 53). Students experiencing isolation have little or no social interaction with the institution or peers.

The development of these student engagement theories was based on the social integration and involvement experiences of traditionally aged, residential students enrolled at four-year universities (Pascarella & Terenzini, 2005). This research is valuable, but students enrolled at community colleges often have different academic goals than their university counterparts. For this study, it is critical to note the

differences in mission and populations served between these types of institutions and community colleges.

Serving a Diverse Student Body

Community college academic advisors serve a diverse student population. The diverse nature of the student body is noted as the key difference in advising at a community college as opposed to a four-year institution. More so than their university counterparts, advisors at community colleges need to focus on basic college terminology and functions because their advisees are predominantly first-generation, academically underprepared students who may not have a frame of reference from which to draw (AACC, 2013a; Frost, 2000, King, 2002). These students are attracted to community colleges largely because of the institutions' commitment to accessibility and affordability. To be effective, advisors must acknowledge and celebrate the differences between students and adjust their approach to each advising session accordingly. This diversity is based on a variety of demographic and learner characteristics such as age, academic preparedness, instructional modality, and reliance on technology. An in-depth description of these learner characteristics is provided below.

Nontraditional Students

Returning to school while maintaining other responsibilities, nontraditional college students have unique characteristics that set them apart from their traditional counterparts. According to the National Center for Educational Statistics, 73% of undergraduates have at least one nontraditional characteristic such as not enrolling in college immediately after high school graduation, working full time, being financially independent, having dependents, being a single parent, or not having a high school diploma (AACC, 2013a; Choy, 2002; Mullin, 2012). While there are about as many

nontraditional students as there are traditional students in the undergraduate population today, nontraditional students have special needs and are more likely to leave college without a degree (Choy, 2002). These highly motivated adults enroll in classes and face challenges, such as maintaining employment, meeting the needs of their families, and handling other responsibilities associated with adult life (Cross, 1980).

Nontraditional students “need help in building their confidence as students, in acquiring or refreshing study skills, and in managing their time and other resources while in school” (Benshoff & Lewis, 1992, p. 3).

Advisors are often the first point of contact students have with the institution. Often nontraditional students enroll in school unsure of their academic abilities (Benshoff & Lewis, 1992) and advisors have the opportunity to help these students gain self-assuredness by respecting their individual differences (Peters, Hyun, Taylor, & Varney, 2010). Advisors must acknowledge the uniqueness of nontraditional students by personalizing academic advising and fostering ongoing communication. Peters and her colleagues (2010) urge advisors to touch base with nontraditional students often and suggest using technology, such as texting, email, instant messaging, and social media, as creative ways for meeting the academic advising needs of nontraditional students. “The most successful advisors take time to learn each student’s story, identify the student’s strengths and challenges in this new environment, and respectfully and effectively link these students to the resources that will best suit their individual needs” (Peters et al., 2010, para. 4).

Underprepared/Developmental Learners

Developmental education, otherwise referred to as “college preparatory” or “remedial,” is the gateway to college credit course work for many underprepared college

students. Offering the developmental courses some students need for success is a vital part of community colleges' missions. To that end, 90% of community colleges in the United States offer such coursework (Boylan, Bonham, Claxton, & Bliss, 1992).

Students are identified as underprepared and placed into developmental coursework on the basis of placement test scores, namely ACT and SAT. However, a placement test called the Postsecondary Education Readiness Test is also used to place students since the other standardized tests are not required for admission to a community or state college. However, these cognitive assessment instruments do not measure other factors that serve as accurate indicators of potential for success in college (Boylan, 2009).

Required remediation often results in an extension of time to earn a degree, which can negatively impact student persistence (Bettinger & Long, 2009). Community college advisors must take time to explain why these courses are important to the students' success as these courses are also financially costly for students since tuition rates are the same for remedial and college credit coursework. Advisors face the challenge of helping these students complete their degree despite additional investments of time and money.

Distance Learners

Institutions offering online learning opportunities must provide the same quality academic advising to their online learners as they provide to on-campus students (Shea, 2005). Distance learners expect to have access to quality services and, with the growth in competition for enrollment between institutions, it is essential that institutions continue to address the unique needs of their distance learners. Facing feelings of fear and isolation (Wegerif, 1998), as well as trying to establish a sense of community (Hara

& Kling, 2003; Rovai, 2002), advisors should be aware of the challenges distance learners face. All students, whether on-campus or at a distance, benefit from enhancements to online services. These enhancements lessen the need for a campus visit, thus shortening the wait time students experience on campus.

Distance learners' readiness largely impacts their ability to succeed in an online program and effective academic counseling can enhance readiness. Online learners must overcome the obstacle of the lack of physical presence and develop relationships with faculty, advisors, and other students. Because advisors can positively impact readiness, distance learners need to have equal access to academic advising to ensure success and a positive learning experience (Eastmond, 2000; Kember, 1995; Steele & Thurmond, 2009).

Millennials/Digital Natives

Traditional undergraduates today have grown up in a digital environment, relying on technology to interface with the world around them. Working with the Millennial Generation requires understanding some of their distinct characteristics to better understand their motivations and expectations (DeBard, 2004).

Although hardworking (Elam, Stratton, & Gibson, 2007), Millennials are less likely to take responsibility for their actions than generations before them (Brownstein, 2000) and are accustomed to being treated special (DeBard, 2004). Lacking critical thinking and conflict-resolution skills, Millennials also endure greater parental participation and interaction. Helicopter parents hover over all aspects of their children's education, from admissions through graduation (Elam et al., 2007). Thriving on collaboration and cooperation, Millennials value achievement and expect to earn high grades. However,

they study less and, due to grade inflation in high school, have an unrealistic perspective of what it takes to be successful in college (DeBard, 2004).

Lacking in their face-to-face interpersonal communication skills, Millennials have become accustomed to instant gratification as a result of their reliance on technology (Elam et al., 2007). Known for relying on technology to use, create, and share information (Lippincott, 2010), the keen multitasking Millennials value convenient, any time/any day, one-stop delivery of student services on college campuses and services should be provided accordingly (Cawthon, Havice, & Havice, 2003). To meet the needs of today's college students, advisors must become familiar with and use the technologies integrated into Millennials' daily lives. Their need for instant gratification and immediacy in response requires the modernization of academic advising through technology. However, the personalization of academic advising, essential to foster Millennials' sense of uniqueness, must not be sacrificed as a result of this technology integration.

Academic Advising Research

Research on academic advising has typically focused on students' satisfaction with, preferences for, and attitudes toward services received (Andrews, Andrews, Long, & Henton, 1987; Fielstein, 1994; Lowe & Toney, 2000; Smith, 2005; Trombley, 1984; Winston & Sandor, 1984). Other research efforts have focused on the relationship between academic advising and institutional retention (Beal & Noel, 1980; Metzner, 1989). However, a growing number of recent studies focus on advisors' perceptions of academic advising (Allen & Smith, 2008; Barnes & Austin, 2009; Harrison, 2009; Murrell, 2005; Willis-Haslip, 2011; Wyatt, 2006). Some studies focus on the unique perspectives of community college advisors and the challenges they face (Bracken,

2004; Mikluscak, 2009; Solis, 2012). Despite institution type or context, the need for initial and ongoing advisor training and development is a permeating theme throughout the research literature on academic advising.

Student Satisfaction

Student satisfaction is a commonly studied factor of academic advising. Lowe and Toney (2000) conducted a study to examine students' satisfaction with academic advising based on the type of advisor and frequency of advising among students in a teacher education program at a university. Variables studied included the type of advisor (faculty or professional), status of student (undergraduate or graduate), and frequency of contact. Based on survey results from 200 students, Lowe and Toney found that services provided vary greatly across the institution and students' perceptions of the importance of academic advising differed based on student status. They recommend academic advising become a high priority activity in higher education where advisors' responsibilities are well defined and adequate and ongoing training is provided. Similarly, Smith (2005) provides a framework for creating personalized relationships with students that includes nine components of personalization based on his qualitative research on the components and structure of an advisor's relationship with 11 students. Both studies identify quality academic advising as a critical component in student success.

After interviewing students about their preferences in academic advising, Fielstein (1994) found the majority of the respondents indicated that becoming personally acquainted with their advisor was a high priority. Findings of Winston and Sandor (1984), considered seminal researchers in the field, align with the views of the majority of respondents in Fielstein's study in that students preferred a developmental

approach over a prescriptive approach, rejecting the “advisor knows best model” (Fielstein, 1994, p. 76). However, 17% of the students who participated in Fielstein’s 1994 study did not consider having a relationship with their advisor to be a priority. This finding offers an opposing perspective for those who subscribe to the developmental advising approach and is contrary to findings that developmental advising is always preferred (Andrews, Andrews, Long, & Henton, 1987; Trombley, 1984).

Retention

A pivotal study that brought academic advising to the frontline of retention efforts was conducted in 1980 by Beal and Noel and involved the review of findings from the 1979 “What Works in Student Retention” national survey. To identify, analyze, and compile information about efforts being made to help retain students in higher education, questionnaires about retention from 947 institutions, along with 1,024 activity report forms, were collected and analyzed. The three areas of concern were academic stimulations and assistance, personal future building, and involvement experiences. Academic advising was identified as a method for addressing all three of these concerns (Beal & Noel, 1980). Showing that quality academic advising has a positive impact on student retention, Metzner (1989) found a negative association between quality academic advising with drop out based on these factors:

- better academic performance (based on grade point average);
- their belief that an education at the university had greater value for future employment opportunities;
- more satisfaction with courses and role of being a student and less intent to leave the institution. (p. 432)

Advisors' Perceptions

Some recent research has focused on advisors' job satisfaction and perceptions of job performance. Murrell (2005) studied 34 advisors and 573 of their students to examine academic advisor job satisfaction and the associated implications for student satisfaction with academic advising. Findings indicated a positive relationship between advisor autonomy and student satisfaction as well as advisor advancement opportunities and student satisfaction. Murrell's (2005) findings indicate that whether or not advisors are satisfied with their job translates to whether or not students are satisfied with the advising they receive. Wyatt (2006) conducted a study on student, staff advisor, and faculty advisor perceptions of academic advising to investigate how well they are meeting the NACADA goals for advising. She discovered that faculty and staff advisors believed they were meeting the goals as defined by NACADA. Overarching findings from both studies include the need for adequate training and recognition for a job well done.

Other recent studies have focused on advisors' perceptions of self-effectiveness within certain organizational structures. Allen and Smith (2008) and Willis-Haslip (2011) support a dual structure for delivering academic advising services. Based on results from an inventory of academic advising functions, Allen and Smith found that "students were less satisfied with the advising they received than faculty were with the advising they provided" (p. 621). They also found significant convergence in what students and faculty believe to be important in academic advising, namely the receipt of accurate information. Similarly, Willis-Haslip (2011) investigated the perceptions of faculty and staff academic advisors in regard to "the importance, responsibility for, and satisfaction with 12 specific academic advising functions at the University of Alaska" (p. ii). Her

findings also included support for a dual model of advising based on the implicit importance of academic advising in providing accurate information to students.

To investigate advisors' perceptions of what an effective advisor does, Harrison (2009) surveyed 17 nursing faculty and identified 54 characteristics of an effective advisor. The most cited characteristic was knowledgeable, a finding similar to Allen and Smith (2008) and Willis-Haslip (2011). Other characteristics used to describe an effective advisor included being available, possessing communication skills, and possessing moral virtue. Similarly, Barnes and Austin (2009) studied the perceptions of 25 exemplary doctoral advisors about their professional roles. Advisors indicated specific responsibilities for which they were accountable, including helping students be successful, develop as researchers, and develop as professionals as well as certain functions that described their various roles, including collaborating, mentoring, and advocating. Friendly, professional, supportive, accessible, and honest were characteristics advisors used to describe an effective advising relationship. While Barnes and Austin (2009) and Harrison (2009) focused on advisors working with students at different levels of education, their findings describing an effective advisor align with previous research (Allen & Smith, 2008; Hunter & White, 2004; Smith, 2005) and have application across higher education settings.

Community College Advisors' Perceptions

Focused specifically on the community college system, Solis (2012) qualitatively investigated the perceptions of advisors to gain a more detailed view of the academic advising process. Through interviews with 16 advisors at a community college that had recently undergone a change in organizational structure to a one-stop model, Solis found that from the advisors' perspectives several factors affect the advising process:

advising setting and context, advising styles, advisors' perceptions of student characteristics, and advising experiences. While these findings were specific to one location, they provide insight into improving similar organizational structures. Solis' study addressed the impact of context on advising effectiveness. Stolar (1994) and Solis (2012) stated that advisors' perceptions about advising are affected by environment in addition to internal views and experiences. They found that quality suffers in an environment where students feel rushed and their confidentiality is not protected and that advisors convey their own negative feelings about the environment during interactions with students in these types of situations. An environment where students and advisors feel hurried is created, according to Stolar (1994) and Solis (2012), without allowing for adequate time necessary for in-depth advising. These environments prevent students from receiving the quality of service they deserve. Recommendations for improvements to advising included adding group advising, including faculty, establishing an environment conducive to student privacy, and providing ongoing advisor professional development.

Community college advisors' preconceptions of students, a factor Solis (2012) found to impact the advising process, was Bracken's (2004) research focus. She examined "the relationships among advisors' attitudes toward developmental placement, the way they perform their advising duties, and the subsequent progress and success of their advisees" (Bracken, 2004, p. 67). The 47 participating advisors indicated they were likely to advise in accordance with their attitudes toward underprepared students and the institution's developmental placement policy. As Bracken concluded, "advisors perform the activities that they believe are important" (p.

100). As such, advisors need training to understand the *act* of advising and the philosophical underpinnings of the various advising theories and approaches. Such training opportunities should include self-reflection so that advisors can recognize and discuss their underlying attitudes, providing training facilitators with the opportunity to address any misconceptions (Bracken, 2004).

Recognizing the lack of advisor preparation, Mikluscak (2009) administered a questionnaire to over 300 advisors designed to elicit their views of training and development provided. Mikluscak qualitatively investigated the training provided to community college advisors to determine what factors advisors believe to be crucial for supporting their roles as advisors. Emerging themes included an overall lack of training; the significance of a positive relationship between advisor and advisee; lack of administrative and peer support; and the need for additional funding, staff, and space. These findings support those of other researchers (Bracken, 2004; Solis, 2012) and shed light on the critical need for the additional training and development of advisors in the community college setting.

Consistent with the overarching theme among studies on community college academic advising, Stolar (1994) concluded that advisor training is insufficient based on questionnaires collected from 46 advisors at a Texas community college. While advisors felt they played an important role in the retention and academic success of students, they did not feel they were adequately prepared. The advisors suggested a series of workshops that would help keep them abreast of institutional and curriculum changes. These workshops would also help develop their basic skills by providing hypothetical advising situations to act out, which would help the advisors become more

efficient and effective in their roles. Advisors also emphasized the importance of the right environment for providing quality academic advising, citing the need for student privacy and sufficient time to spend with students.

This need for privacy and time is supported by King's (2002) distinctions between academic advising at community colleges and four-year institutions. Typically housed in a self-contained structure, academic advising at community colleges begins with an overview of the prevalently used terms. More often than not, advising is initially practical and prescriptive so that students can complete the necessary steps toward matriculation. Due to the non-traditional nature of the student body, advisors must also be aware of students' outside commitments to effectively advise about available resources on and off campus. Another unique aspect of community college academic advising includes the preparation for and facilitation of transferring to a four-year institution. This wide range of skills and knowledge required of community college advisors serves as the ongoing impetus for continued professional development.

Technology in Academic Advising

Research on the use of technology in academic advising has largely been in the form of implementation reports. Various electronic communication tools, including virtual reality interfaces, social media, integer linear programming, and early alert software, provide advisors with tools to increase their efficiency when working with large caseloads.

Electronic Communication

Effective communication is essential for all productive learning and advising experiences, but particularly when integrating technology. Betts (2009) stresses the importance of effective communication with students and recommends ongoing training

and professional development for staff and faculty. Unlike face-to-face communication, technology-mediated communication lacks the non-verbal cues that contribute to a message's meaning. Such messages can be "lost in translation" (Betts, 2009, para. 10) potentially resulting in misinterpretations of message meanings. Betts recommends setting communication protocol expectations and guidelines as well as facilitating familiarization with course management system communication tools. An examination of communication style and tone and the diversification of strategies used are also recommended.

Similarly, Steele and Thurmond (2009) suggest that advisors become focused on customer service, which requires a greater familiarity with the technologies being used. Becoming familiar with the institution's website and online student portal allows advisors to better guide students' navigation. They also argue for reviewing modes of communication available to advisors to ensure that the appropriate method is used in context, i.e. information requests should be handled through email and Smart FAQ software, whereas more in-depth inquiries should be responded to through web conferencing and phone. Steele and Thurmond also recommend using customer relationship management software to track and monitor advising exchanges between advisors and students for identifying professional development needs and for updating the Smart FAQ database.

Virtual Reality

Positing that the use of technology is a solution to the challenge of providing quality academic advising to more students with fewer resources, Leung, Tsang, Lam, and Pang (2010) proposed a virtual reality advising experience called i-Counseling. They contend that this virtual experience is the high-tech answer to the common

challenges advisors face. As enrollment in higher education increases, a greater demand is placed upon institutions to maintain the quality of services offered to a growing number of students. In response, the Open University of Hong Kong has prototyped an intelligent digital agent called i-Counseling to supplement the labor-intensive service of academic advising (Leung et al., 2010). This 24/7 ontology-based information search engine interfaces with students, helping them navigate the system around the clock in an online environment through an animated character that converts text to natural speech. i-Counseling offers two modules from which students can choose, the Academic Counseling Module and the Academic Advisement Module. The Academic Counseling Module provides more generalized information to current and prospective students while the Academic Advisement Module provides academic planning and graduation checks for current students.

The development of the i-Counseling prototype reinforces findings from previous research about online learners' need for immediacy and students' high expectations for quality online services (Eastmond, 2000; Pullan, 2009-2010). It also offers a solution to institutions' challenges to provide these immediate high-quality services with growing enrollments and stagnant, if not decreasing, budgets. However, this technologically advanced initiative fails to consider the importance of developing a connection between students and the institution through a "concerned person on campus" (Habley, 2004, p.16) as well as the need for technical training and ongoing technical support.

Social Media

Perhaps a more balanced approach to facilitating effective communication and developing a relationship with students is through the use of social media. Social media sites provide a venue for communicating with students that is effective because

students spend time on these sites as part of their daily routine (Ellison et al., 2007; Wiley & Sisson, 2006).

Synchronous chat and private messaging through social networking sites are more effective than email communication (Soto, 2000; Traxler, 2007). By penetrating the walls of traditional offices and going online on social media sites to interact with students where they are spending their time, advisors can increase their availability and accessibility and improve the dissemination of accurate and timely information. Social media help students establish and maintain positive interactions and social connections. The use of social media also has links to better grades, engagement, satisfaction, and persistence (Heiberger & Junco, 2011). Social media provide a cost-effective way for advisors at all levels of education to interact with their students.

The Technology in Advising Commission of NACADA endorses the use of social networking and communication sites in the advising process with particular reference to the importance of maintaining secure exchanges of information in compliance with the Family Educational Rights and Privacy Act of 1974 (NACADA, 2005). With institutional emails flooding students' inboxes and quickly getting deleted before they are read, it is important to prioritize the information pushed into social media environments to ensure that students continue to pay close attention and engage with the site.

Integer Linear Programming

Despite the efforts of advisors, some students do not graduate on time. Dechter (2009) cites three factors that prevent students from completing a four-year degree within the expected time frame: "less than full-time enrollment, less than complete academic readiness, and less than adequate course planning" (p. 216). Dechter (2009) proposes an integer linear programming (ILP) optimization model to address the third

factor - less than adequate course planning. This model supplements the use of degree progress reports (DPR), otherwise known as degree audits, to help advisors help students make enrollment decisions. Claiming that DPRs lack the advisory component necessary for providing a suggested sequencing, Dechter suggests the use of ILP to provide a plan to students detailing how they can complete the most courses in the shortest time.

Although this ILP technology would give students a system-generated answer to a degree-completion problem, it cannot replicate the advisor's role in helping students understand the challenges and sacrifices undertaken when they enroll in heavy course loads. From a developmental advising approach, advisors often recommend a light course load early in a student's academic career to allow for the natural progression from simple to more complex challenges (Crookston, 1972; O'Banion, 1972). When students demonstrate success they are then recommended to progress to heavier course loads (Szafran, 2001). Reliance on computer programming alone takes advisors' expertise and experience out of the decision-making process, which could lead to setting students up for failure.

Early-Alert Systems

As opposed to a system-generated course enrollment plan, Northern Arizona University (NAU) implemented the Oracle Peoplesoft Campus Solutions Bolt On called Grade Performance Status (GPS) to increase instructor-student interactions and improve support personnel interventions (Star & Collette, 2010). Improving student performance, retention, and graduation rates were established as the foundational goals of this early-alert system. A result of its implementation was a sense of unity and networked information available to faculty, staff, and students. This sense of unity

fostered an overarching sense of shared responsibility and accountability for student success. Messages sent from faculty to students were individualized, preventative, and positive. These messages were then available to support staff within the shared database and to students within their MyNAU system. Messages were also interactive with live links to additional university resources, encouraging navigation through other parts of the university's web presence.

This implementation aligns with the idea that negative experiences can contribute to students leaving the institution, while positive experiences can lead to students staying (Pascarella & Terenzini, 1991). Star and Collette (2010) illustrate the importance of shared accountability for student success among faculty, staff, and students. Early alert information that is shared across the institution encourages a consistency among staff and faculty messages to students. This system was implemented to provide quality support services for online and on-campus students alike despite budgetary constraints. Its positive results echo the findings of Leung et al. (2010) and Dechter (2009) that technology can aid in student success and retention. When implemented with a personalized touch, such early-alert systems can enhance the advisor-student relationship. The use of various early-alert systems is prevalent across community college campuses.

Gaps and Lingering Questions

With technology integrated into almost all aspects of daily life, it is important to investigate how technology is changing the academic advising profession. And while technology implementation reports are prevalent in the academic advising literature, there is little information about advisors' perceptions of the use of technology in quality academic advising at the university or community college level. The research reviewed

for the purposes of this study suggest that technology integration and quality academic advising are mutually exclusive terms; one cannot exist in the presence of the other. Previous research investigating advisors' perceptions of the use of technology in quality academic advising could not be found. It is important to understand how academic advising has progressed over time, but it is becoming increasingly important to gain an understanding of how this high-touch profession is being influenced by advisors' and students' use of technology to provide adequate training and professional development opportunities on best practices.

CHAPTER 3 METHODOLOGY

This chapter outlines the research methodology and specific procedures that were used to conduct this study, including the restatement of the problem, research design, description of the research settings and participants, and data collection and analyses procedures. The limitations of the study and the researcher's subjectivity statement are also provided.

Restatement of the Problem

Academic advising is currently experiencing a paradigm shift. What has always been considered a high-touch, face-to-face profession is being impacted by both advisors' and students' use of technology. Traditionally, to be effective in their roles, academic advisors have needed to hone skills, such as attending and providing supporting non-verbal cues, in order to be effective in their roles (Hunter & White, 2004; Smith, 2005). Today, academic advisors have needed to become literate, if not proficient, in technology as well to remain relevant and effective. How is this need changing community college advisors' philosophy of quality academic advising and how is technology impacting how advisors operationalize that philosophy through their daily practices?

The following research questions guided this study: In what ways, if any, is technology integrated into quality academic advising in the context of community college advisors' philosophy and definition of quality academic advising? a) What are advisors' perceptions of quality academic advising? b) How are advisors currently using technology in quality academic advising? c) What are advisors' perceptions of using

technology in quality academic advising? d) What do advisors consider to be best practices for integrating technology into quality academic advising?

Research Design

A qualitative research design was used to explore community college advisors' perceptions of the use of technology in quality academic advising. A main feature of qualitative research is "an interest in meanings, perspectives, and understandings" (Woods, 1999, p. 2); in this case, as experienced by the advisors. Unlike quantitative research methods, qualitative methods provide a way to investigate the phenomenon being studied in more depth, resulting in a holistic understanding (Creswell, 1998).

The transcendental phenomenological approach as described by Moustakas (1994) provided the methodological framework for this study. Similar to other qualitative approaches, a transcendental phenomenological approach values the study of human experiences, focusing on the holistic nature of such experiences by searching for meanings and essences. Its purpose is to discover the essence of the experience of a certain phenomena (Cilesiz, 2009). Developed by Edmund Husserl, transcendental phenomenology provides a rational path through which knowledge can emerge by guiding the reduction of prejudgments. This "transcendental state of freshness and openness" (Moustakas, 1994, p. 41) allows for the discovery of the deeper meaning behind the experiences of certain phenomenon (Cilesiz, 2009). Perceptions are the primary source of knowledge in phenomenological studies derived from first-person accounts of experiences (Moustakas, 1994). Since the purpose of this study was to explore the perceptions of community college advisors regarding the use of technology in quality academic advising, this research framework was appropriate.

Sampling

Community College Week's Top 100 Associate Degree Producers ranking was used to identify the population of institutions from which a purposeful sample was drawn based on two criteria: type and location. Purposeful sampling facilitated the selection of information-rich cases for in-depth study (Patton, 1987) with an adequate geographical representation of the U.S. All institutions that were included in the sample are public two-year community colleges because of their open-door admissions philosophy and associated diverse student population (see Table 3-1). The researcher focused on institutions similar to her own so that she would be able to apply the best practices to her own professional practice.

Table 3-1. Participating institutions

Institution	Advisor
Midwestern A Community College	Abby
Midwestern B Community College	Fran
Pacific Northwest Community College	Connie
South Atlantic Community College	Emma
South Central Community College	Barbara
Southwestern Community College	Deborah

The research questions were intended to apply to brick-and-mortar institutions only. While these institutions may also offer online learning opportunities, the advisors at these institutions have the opportunity to interact with students face to face. Advisors at online institutions rely solely on technology to interact with students since they have no brick-and-mortar campus through which they can interact face to face with students. For this reason, online institutions were removed from the population prior to drawing a sample.

Since the purpose of this study was to understand the essence of technology and quality academic advising from the perspectives of community college advisors, it was

important to interview advisors from whom the most could be learned. To be eligible to participate in this study, advisors had to have a minimum of two years advising experience and had to use technology in their professional practice. Institutional and advisor pseudonyms were used to protect the identities of the advisors.

Subjectivity Statement

Of primary importance throughout a transcendental phenomenological study is the *epoche* process. With Greek origins, the meaning of *epoche* is “to stay away from or abstain” (Moustakas, 1994, p. 85). The researcher made a disciplined effort to bracket any and all prejudgments and biases in preparation for deriving new knowledge and made a conscious effort to bracket her personal attitudes and beliefs about the use of technology in quality academic advising. Bracketing helped avoid the possibility of the researcher imposing personal prejudices, viewpoints, and assumptions on the research process (Ashworth, 1999). The researcher made an ongoing effort throughout the data-collection and analysis process to remain as objective as possible focusing solely on the research goals of this study.

At the time of this study, the researcher was a faculty counselor with a master’s degree in higher education leadership and was completing a doctorate in curriculum and instruction with an emphasis in educational technology. Her eight years of academic advising experience as a staff advisor and faculty counselor may have created several possible biases that can arise when the researcher is also the interviewer.

Having experienced both poor and quality academic advising throughout her own academic tenure, she defined quality academic advising as a highly individualized and personalized process in which advisor and student are working together to set goals

with consideration for academic and non-academic circumstances. She believes in using technology to automate certain mundane tasks so that more time can be devoted to the deep discussions that result in a positive advising experience.

Data Collection

As is customary in qualitative research, the researcher served as the primary instrument for data collection. Advantages of the human instrument are the ability to explore unexpected responses for clarity and check with respondents for accuracy of interpretation (Merriam, 2002). Data was collected through in-depth, semi-structured interviews (Spradley, 1979) providing the flexibility to ask questions, probe responses, and reveal the lived experience of the advisors, thus providing richer data. Since the advisors were recruited from community colleges throughout the U.S., all interviews were conducted over the phone to minimize travel time and expenses. Loss of non-verbal and contextual data and the risk of disruptions are potential disadvantages of conducting interviews by phone instead of in-person (Novick, 2008). Conducting the interviews in a quiet location using a reliable phone minimized distractions.

The University of Florida's Institutional Review Board (IRB) approved this study (see Appendix A). With IRB approval in place, the student affairs administrator at each institution in the sample responsible for supervising the academic advising program was emailed. After introducing the current research study to these gatekeepers, the researcher asked for a referral to an advisor who met the selection criteria and was available for interviewing. Interviews were then arranged with each participant on a day and at a time convenient for the advisor. Creswell (1998) recommends five to 25 interviews and Morse (1994) recommends at least six interviews for a

phenomenological study; accordingly, interviews were scheduled with six academic advisors.

While a series of interviews is recommended for phenomenological studies (Cilesiz, 2009; Johnson, 2012; Seidman, 1991), one interview was conducted with each participant to explore quality and technology considerations in one cohesive discussion. To establish a sense of rapport with the advisors, the purpose of the study and scope of the interview was reintroduced from a camaraderie-among-colleagues perspective, creating a relaxed but interactive atmosphere (Moustakas, 1994).

The researcher developed an interview protocol consisting of eleven open-ended questions aimed at exploring advisors' perceptions of integrating technology into quality academic advising. Each of the interviews was guided by this protocol, but probing questions were asked to seek clarification and to explore responses in more depth (Merriam, 2002). Upon completion of the first interview, the researcher revised the interview protocol to include three new questions (see Appendix B). These revisions were also approved by the University of Florida's IRB. The open-ended interview questions gathered the advisors' personal perspectives, opinions, motivations, and assumptions by providing an opportunity for them to respond using their own words.

To address threats to the content validity and usability of the interview questions, the researcher conducted a think-aloud protocol (Johnson & Christensen, 2000; Willis, 2004) with two advisors at her institution, IRSC. A brief description of the study's purpose and an explanation of the think-aloud process were provided. She urged the advisors to share opinions and reactions aloud throughout the think-aloud protocol. After the advisors read each interview question aloud, the researcher allowed ample

time for the advisors to understand the question. Based upon feedback, the interview questions were refined to remove or reword any vague or confusing verbiage. A summary of revisions is provided in Table 3-2.

Table 3-2. Interview question revisions

Original question	Revised question
How many years of advising experience do you currently have and at what level(s) of education?	How many years of advising experience do you currently have? At what level(s) of education or in what types of professional settings?
What is the advising organization or structure at your institution? What do you do as an academic advisor?	How are advising services organized at your institution? What are your primary responsibilities as an academic advisor?
Could you describe what you would consider a typical advising session?	Could you describe what you would consider a typical advising session? How, if at all, does it vary depending on whether you are meeting with the student face-to-face, talking over the phone, or communicating through email?
Could you describe what you would consider an exemplary advising session? How do you see technology fitting in?	Could you please describe what you would consider an exemplary advising practice? How, if at all, do you see technology fitting in?

This process helped to ensure that the questions were clear and able to solicit the types of information the researcher sought to collect for the purposes of this study.

In preparation for each interview, consent forms (see Appendix C) were provided to the advisors and signatures were acquired. The advisors were then asked to complete a demographic survey (see Appendix D) and were provided with the list of interview questions. By doing this, the advisors had the opportunity to critically reflect on their professional practice in advance. This preparation helped put the advisors at ease during the interview (Spradley, 1979). Interviews were digitally recorded with permission.

Data Analysis

In qualitative research, data analysis is simultaneous with data collection (Merriam, 2002). According to Glesne (2006):

Data analysis involves organizing what you have seen, heard, and read so that you can make sense of what you have learned. Working with the data, you describe, create explanations, pose hypotheses, develop theories, and link your story to other stories. To do so, you must categorize, synthesize, search for patterns, and interpret the data you have collected. (p. 147)

Upon completion of each interview, the researcher transcribed the audio files verbatim to create interview transcripts. She then began analyzing the data; this allowed her to use a flexible approach to interviewing the remaining advisors, giving her the ability to make adjustments to questions as needed to test emerging themes and categories.

To immerse herself in the data and build familiarity with each advisor's experience, the researcher read each of the interview transcripts and listened to the audio recordings multiple times. The validity, or trustworthiness, of the data collected was verified through a process called member checking, during which the transcripts were shared with the advisors to make sure they and their ideas were represented accurately. All of the advisors agreed that the transcriptions were accurate.

Initial data analyses followed Moustakas' (1994) methods for transcendental phenomenological analysis. It began with the phenomenological reduction process during which bracketing and horizontalizing of statements occurred. The focus of this study remained bracketed to ensure the analysis was concentrated on the research questions. The researcher treated each statement with equal weight and value by first horizontalizing them. She then eliminated any duplicate or irrelevant statements. This allowed her to break down the horizontalized statements into meaning units that could be more easily analyzed. These meaning units were then clustered into themes from

which individual textural descriptions of the experience were developed. An initial analytical analysis of individual textural descriptions included each advisor's description of what using technology in quality academic advising looks like, referred to as its textures. This resulted in in-depth descriptions of each advisor's experiences, referred to as her profile. This profile detailed the organizational context within which the advisor worked, her primary responsibilities as an advisor, her beliefs about advising, and her use of technology. A thematic analysis followed resulting in a composite textural description developed by integrating all of the individual textural descriptions (Moustakas, 1994). During the imaginative variation process, the researcher determined the essential structures of each advisor's experiences, which provide the underlying meaning and pertain to how the phenomenon was experienced. These structural qualities were also included in each advisor's profile.

The textural-structural synthesis required the researcher to "intuitively and reflectively integrate the composite textural and composite structural descriptions to develop a synthesis of the meanings and essences of the phenomenon or experience" (Moustakas, 1994, p. 181). Moustakas (1994) and Cilesiz (2009) stress that essences are never completely exhausted and this synthesis only represents the essences at a specific time and place based on an individual researcher's study of the phenomenon. The goal of this synthesis was to provide an overarching, holistic statement regarding the essences of the experience of the phenomenon in its entirety. However, this broad approach did not allow the researcher to address this study's specific research questions and made limited use of the rich data collected from interviews with the advisors.

As a result, the researcher returned to the original transcripts and coded each one by research question: perceptions of quality in academic advising, current technology being used, perceptions of integrating technology into quality academic advising, and best practices. This open coding process, as described by Creswell (1998), allowed her to chunk the data pertaining to each research question into smaller categories and subcategories, or codes, which could be more easily analyzed and resulted in numerous words and phrases that corresponded to each advisor's organizational context, primary responsibilities, beliefs about advising, and use of technology in advising.

To avoid conceptual tunnel vision, described by Morse and Mitcham (2002) as "seeing or justifying data as being related to, or considered examples of, the concept being investigated," the researcher then created a code sheet for each protocol question that included codes representing each advisor's responses. This allowed her to gain "new insights by breaking through standard ways of thinking about or interpreting phenomena reflected in the data" (Corbin & Strauss, 1990, p. 12). By clustering similar codes, emergent themes as well as distinct outliers were identified.

An external individual coded two of the interviews as a friendly-reviewer using the same process as the primary researcher. A discussion between the researcher and the friendly-reviewer followed during which similarities and differences in identified meaning units were addressed. While there were overlapping similarities in the themes of meaning units, the researcher had initially taken a more analytical approach while the friendly-reviewer analyzed the transcript more thematically. Upon breaking down the themes, both parties agreed on the identified codes overall.

Limitations

There were three limitations to this study resulting from the approach to selecting advisors. First, the population from which a purposeful sample was drawn was not homogenous. While a homogenous population is recommended for phenomenological studies, *Community College Week's* Top 100 Associate Degree Producers list included institutions with differences in enrollment and location. However, the advisors employed by these institutions, specifically those within the purposeful sample, have the experiences of advising community college students in common resulting in a shared perspective despite any institutional differences. Second, the researcher relied on gatekeepers at each of the participating institutions. She emailed the administrators responsible for supervising academic advising services at each of the institutions in the sample. She then asked for a referral to advisors with at least two years of advising experience and who use technology in their professional practice. As a result, these gatekeepers may have introduced bias at the point of determining which advisor should participate in the study. To overcome this limitation, advisors had to meet certain criteria to participate in the study. Third, there were no male participants; all six of the advisors interviewed are female.

Because this study focused on the perceptions of advisors working at public, open-access community colleges across the U.S., the perceptions of advisors working at private institutions or four-year institutions were not included. Perceptions of advisors at all institutions listed in *Community College Week's* Top 100 Associate Degree Producers ranking were not included due to the limited size and scope of this study.

The limitation associated with the data-collection process was the reliance on phone interviews instead of interviewing advisors face to face. The researcher's budget

did not allow for the extensive costs associated with in-person interviews with advisors located across the U.S. Because the researcher relied solely on phone interviews, she was unable to include observations of the advisors in their natural setting or non-verbal communication as sources of data.

Lastly, researcher bias limited the data analysis in this study. While the researcher acknowledged that pure objectivity could not be attained (Glesne, 2006), her experiences and preconceptions of the research topic may have impacted the analysis of the data collected for this study. Member-checking and inter-rater reliability measures were used to overcome this limitation.

Significance

This study sought to inform the practice of academic advising by addressing a recognized need in the research literature as well as a contextual need for understanding the omnipresence of technology in academic advisors' professional practice. This understanding will allow for the sharing of best practices with the academic advising professional community. By sharing best practices, advisors can spend less time trying to find what works well and more time implementing effective practices. To inform practice and contribute to the field, there was a need to identify quality academic advising and understand how technology plays a role. Providing advisors with an opportunity to critically reflect on their professional practices, this study provided advisors with a voice for sharing input and feedback.

CHAPTER 4 RESULTS

Perceptions, derived from first-person accounts of experiences, are the primary source of knowledge in phenomenological studies (Moustakas, 1994). Fittingly, the researcher explored advisors' perceptions by conducting in-depth interviews.

In the process of analyzing the data, profiles were created that provided in-depth descriptions of each advisor's experiences and included direct quotations. The first section of this chapter presents those profiles, which resulted from analytical analyses of the data. The second section of this chapter (Thematic Analyses) presents the themes that resulted from thematic analyses of responses across advisors showing commonalities and differences in experiences.

Advisor Profiles

Each of the advisor's profiles begins with her demographical information and her educational and professional background. The next section describes the advisor's primary responsibilities and typical advising sessions. The advisor's beliefs about advising, specifically her definition of quality in advising, goals for advising, and best practices follows. Each profile concludes with a description of the advisor's use of technology, including specific tools she uses and perceived benefits and challenges to integrating technology.

Abby's Experience

Abby, a Caucasian female in her twenties, has served as an academic advisor at Midwestern A Community College (MACC) for the last three years. She earned a bachelor's degree in history and a master's degree in student affairs and higher education. She also has professional experience working as an online program

coordinator at the community college level. Since 2011, she has presented her institution's new advising and student case management model at six local and national conferences.

Organizational context

Advising services are decentralized at MACC. Students receive services from one of four different advising centers. Students receive specialized services from either the First Year Advising Center, Center for Student Success, MidwesternAOnline, or Academic Advising Center based on several key student characteristics. The First Year Advising Center on the main campus provides advising services for new students with fewer than 12 credit hours or who are in their first two semesters at MACC. The Center for Student Success provides advising services for new main campus students who placement tested into at least one developmental education course, but excludes "non-local learners." MidwesternAOnline provides advising services for those non-local learners, which are defined as students that live more than 60 miles from the main campus. The Academic Advising Center provides advising services for current main campus students who have been at MACC for more than two terms and who are not working with the Center for Student Success.

Primary responsibilities

Working exclusively with non-local learners, Abby has students "spread out across the country and throughout the world." A proponent of technology integration, Abby has an optimistic outlook on the benefits of integrating innovative technology, specifically Adobe Connect, to enhance her practice by allowing for a more interactive advising process. She is looking forward to integrating Adobe Connect, a web conferencing tool, because it will simulate the interactivity that is achieved in face-to-

face meetings with its high quality audio and video capabilities. Adobe Connect offers ease of access; advisors and students need only a web browser and Adobe Flash Player to begin collaborating and communicating. Though Abby is excited about this possibility, she currently relies primarily on phone and email to communicate with her students.

Approaching advising from a “holistic case management” concept, Abby works with her students from the point of admissions until they complete their program or reach their goal. Her assigned caseload is between 90 and 120 students. She works with them as an advisor, but also as “a coach.” Abby ensures that her students have the knowledge and skills to be successful online learners, which includes “a conglomerate of resources” from career resources to time management to financial aid to books. She addresses immediate needs by “just helping them with any of those steps that they’re stuck at.” Since her students are not on campus, Abby also serves as a “liaison” between the students and other departments.

Abby’s primary responsibilities include transcript evaluation, degree planning and academic map creation, registration, and course advising. While the majority of the students she advises are working toward completing an online program, she also works with transient students who are only interested in completing certain courses rather than an entire program. Abby also considers becoming an expert in the online curriculum, courses, and programs as well as maintaining student information primary responsibilities.

In addition to her advising responsibilities, which she describes as 65 to 70% of what she does, she also works on other projects. One of these projects is “How to

Succeed in an Online Course,” which is a free, online course that is required for students that want to complete an online course at MACC. It provides an orientation to MACC’s learning management system, Angel, and helps students determine whether online learning is for them. Abby facilitates, manages, and updates that course. She is the liaison for four online programs and works with the respective departments to ensure that correct information is disseminated and updates that information as necessary. Abby also reports MACC’s distance learning registration figures to the state. She helped create an optional, online orientation resource, called “Navigating MidwesternAOnline,” which she manages and updates.

Given the holistic case management approach to advising that MACC uses, Abby’s first contact with students begins with an “intake process.” Student Success Plan (SSP) is the case management software used to support the intake process, which includes discussing academic goals and ensuring that students’ majors are appropriate and correctly documented. Abby then discusses costs and payment options, time management, outside commitments, and the final steps left to complete before enrolling in classes. Abby then explains the creation and use of an academic map, which is the degree plan reflecting the required courses for each student’s particular program. She also explains other facets of the online education experience, including course testing and additional available resources. Abby follows the intake discussions up with emails in which she explains how to get registered for classes.

Relying primarily on email and phone to communicate with her students, Abby finds she uses different means of communication to accomplish different tasks. She believes phone conversations are more convenient for explaining important information

since they allow the students to ask questions. If important information is initially shared in an email, she finds a lengthy back and forth chain of emails follows. As such, Abby prefers to first discuss important issues, like transcript evaluations and degree planning, by phone and then follows up with an email so the student has a record of important advising exchanges, discussions, and any changes that were made.

Beliefs about advising

For Abby, knowledge is key to her success as an advisor. Abby strives to meet students' expectations and understands that students expect advisors to know the answers to their questions. Because she uses a holistic case managing approach, Abby feels better equipped to answer students' questions because she knows where they are in the process. She feels it is essential to show empathy and be organized. Abby describes being responsive as another critical component of quality academic advising. She advises as though each interaction could have positive or negative consequence on that student's success. As such, she tries to respond to students' inquiries in a timely fashion. According to Abby, responsiveness is crucial for retention because "the students that don't receive services in that way are often the students that are not retained because they receive misinformation." She believes her high standards of professional practice have a positive effect on students' impression of the institution overall. Abby emphasizes that being knowledgeable and responsive is critical to helping her students meet their educational goals and believes these skills help remove impediments that may be restricting the students' progress. She asserted:

If they're unable to get in touch with anyone at the college, or get in touch in a timely manner, they may have missed the deadline to get registered and at that point you've lost touch and focus with the student. They're no longer as interested in attending your school.

Abby thinks students should get what they pay for and believes that “it’s only your duty to do things in that way.”

For Abby, helping students set and meet goals - taking them from where they are to where they want to be - is the goal of academic advising. Abby stated, “I’m trying to take the student from the very beginning, determine what the student’s goals are and help them accomplish those goals; I feel that everything falls into that category.” A lack of awareness of course sequencing and offerings can create barriers to students’ academic progress. Abby feels knowing program curriculum is critical to keeping students on track toward timely completion. She believes that the students’ ultimate goal is to have a career. Understanding that students want to graduate on time in order to get into the workforce sooner motivates Abby to be as thorough as possible when advising students. Sometimes students do not know what they want to do for a career. Even if they do, they do not always know what academic path will lead them there. In these cases, Abby tries to help them determine what their purpose is and what they want to do to keep from “wasting the students’ time and money.”

Abby asserts that being timely and responsive is an exemplary advising practice. Having received less than timely responses during her own time as an undergraduate and graduate student, Abby feels getting a response within one business day is what students really want and need. While she understands that this may be uncommon practice given that advisors are busy and advising offices are understaffed, Abby tries to keep students moving forward by responding to inquiries in a manner she would have liked as a student. She said:

I was a transfer student to a large institution, a university, and at the time they had over 50,000 students, so I fell through the cracks and I did a lot of

self-advising. Thankfully, I knew how to read the curriculum and I was able to graduate early.

Once she spoke with an advisor, she was advised to consider the graduate program that led her to her career today. According to Abby, “if you’re being reactive instead of proactive as an advising model there are so many students that you’re missing.”

Technology use in advising

According to Abby, technology can be beneficial. Technology makes information readily available and accessible. She stated, “SSP is our case management software and if I’m on vacation for a week anybody else in my office that acts as a coach can work with my students when I’m out of the office.” She appreciates the conveniences of electronic record keeping and continuity of service that SSP allows. Perhaps this is because consistency and continuity of service results in another recognized benefit Abby is encouraged by: more informed students. Students also benefit from advisors’ use of technology by having streamlined access to information. According to Abby,

When students log into their student portal for the college at large, they are going to be able to see the steps they still need to complete and any notes I might have for them or action plan items. It really brings everything together for the student so they’re not searching many different areas of the website for the information or trying to remember exactly what we told them to do. They can see what they have to do anytime they login and will have the benefit of having everything in one spot.

Other types of technology are used at MACC in addition to SSP. MACC recently contracted with Career Coach, which is a career resource platform that helps students identify careers based on their major. This resource also allows students to search related jobs in the surrounding area. All of the academic coaches in Abby’s department are also being trained in using Adobe Connect because “it gives us, as coaches, the opportunity to work through documents with the student and they can also save them

onto their computer – so less email back and forth – and they can download the documents instantaneously.” Every student also has online access to an individualized student portal, something that Abby considers typical, which includes online registration, email, class schedule, booklist, registration, and degree audit.

Technology is changing the way that Abby provides services to her students. Part of Abby’s job is helping students become comfortable using the tools and resources available to them. She credits technology for making college processes easier for students to navigate. Abby also feels that a big advantage of integrating technology is having a history of students’ advising sessions. She claimed, “Having a history of what we’ve done, what we’ve told students, and what we’ve sent to them is really beneficial.”

However, Abby recognizes that not all of her colleagues share her pro-technology opinions and developing widespread buy-in can be difficult. While SSP’s Map Maker has been adopted widely across the institution, SSP has not been completely adopted. Abby believes the process of implementing a technology that large can be political. Adoption and appropriate use of the technology requires technical training and support. She believes focusing on the technology’s benefits is key to overcoming resistance to change and said, “I think a huge challenge is explaining why and convincing people that this is a better method than what we were doing before.”

Barbara’s Experience

Barbara, a female Native American in her fifties, has served in an advising capacity for the last 20 years at high school and college levels. She currently advises students at South Central Community College (SCCC) as a natural health science advisor. She earned a bachelor degree in engineering, human resources and a

master's degree in human services. She also has professional experience working as a college professor and manager.

Organizational context

Advising services are offered throughout the main campus of SCCC by embedded academic advisors, but the hub of advising activity is in a centrally located building toward the center of campus. This location also includes the career center, track center, and outreach services. A team of part-time advisors offers advising services with oversight from a lead advisor who is there full time. Lead advisors are embedded in each department and are responsible for in-depth, program-specific developmental advising. They are specialists in their respective areas and see students on a walk-in and appointment basis.

Primary responsibilities

Barbara regularly advises students enrolled in the allied health majors, including nursing, radiology technology, and other health science programs. She also has additional responsibilities as the instructor of five student success courses. This course is required for first-time-in-college students who have placed into two or more levels of remedial courses. As an embedded program advisor, lead advisor, and student success class advisor, Barbara makes sure her students have accurate and timely information about institutional policies and procedures. She does this by making advising regularly available, accepting walk-ins, scheduling appointments, and providing online support. Barbara maintains student records, allowing her to monitor students' progress toward their academic goals. She readily shares information with students regarding academic requirements, policies, and procedures and students identify

educational goals and objectives. She also imparts information relative to potential scholarships and future career options.

Barbara tailors advising to each student based on his or her specific needs and interests. She recognizes the need to be sensitive to students' personal values and provides appropriate referrals when a student's needs are beyond her skillset. Her student caseload, approximately 125 students, is made up of the students enrolled in her five student success courses.

Typical advising sessions vary based on what type of student she is advising, but usually include a discussion of academic goals, career goals, financial aid resources, and the student's progress toward success. Barbara also reviews students' needs to determine if referrals to more specialized services, like counseling, are needed. She then helps them develop their academic plan. She also checks the academic program used at SCCC, called I-Star, to make sure their information is correct. She provides students who are undecided about their major with an Academic Advising Report. Regardless of how Barbara is communicating with a student, whether it is face to face, over the phone, or through email, there are particular topics that need to be discussed and she is sure to provide information about any necessary and available resources. Thus, while she provides advising through various tools, there is not much variance as far as the advising provided.

Beliefs about advising

For Barbara, quality academic advising is a function of timely responses and accurate information. Listening is a first critical step in this process. Barbara believes in the importance of knowing when to listen and when to act. When advising students, she first listens, believing that acting too soon can lead to misinterpretations. After

listening, she encourages students to use their decision-making skills to identify a set of alternatives and consequences for certain decisions concerning their education.

Barbara's aim is to help students develop decision-making skills and establish goals while empowering them to take ownership of their educational experience. According to Barbara, "Advisors are the resources and the tools used to teach students how to set goals, how to make a plan, and how to be successful toward their goals."

The goal of academic advising, according to Barbara, is to help students develop a plan based on their goals and objectives. This includes teaching them how to make goals and decisions pertaining to their education, career, and personal lives. Part of this teaching process includes helping students gain a better sense of who they are by helping them understand their abilities, their interests, their aptitudes, and their limitations. For Barbara, quality academic advising includes providing students with accurate and timely information based on her overall understanding of institutional policies, procedures, and resources in addition to academic programs. Through organization and prioritization, Barbara strives to leave no inquiry unanswered at each day's end and prides herself on her ability to follow through when promised.

Barbara recollected a student interaction, described as a pivotal time in her career, which clarifies how she sees her role as an advisor. She said:

A student actually came to me and said that she wanted to do what I did. She said, 'Because you change lives. You make our dreams possible.' I saw my knowledge of our campus, our degrees, our programs, and my knowledge of education would allow students to reach those goals and those dreams they have set forth. That connection with that student made me strive to have as much information, knowledge, particular to programs and different universities, so I could be that link for them to give them the answers necessary to reach their goals.

At that moment, she no longer thought of advising as just a job. Rather, she recognized it as a valuable and worthwhile career.

Barbara also believes that quality academic advising stems from a properly developed program with opportunities for recognition for advisors. According to Barbara, “It’s important to identify exactly what the goals are as far as advising, but to go beyond that and make sure that you have the components to make that a living thing that comprises all of your advisors.” This properly developed program requires a philosophy of practice that is shared with students so they can know what to expect from advising services. According to Barbara, this philosophy should dictate the structure and organizational model for delivering academic advising and the supporting advisors should be trained and offered ongoing professional development opportunities. Electronic systems should be in place so that advisors can work effectively with students. Effective advising includes strategies to accommodate specific advising needs or programs or groups of advisees. How often advisors meet with students, referred to as “frequency of consultation,” should be considered when determining the ratio of students to advisors. Given the extensive responsibilities Barbara describes for such a properly developed program, she also thinks it is important to recognize and reward effective advising. She asserted, “Recognition of academic advising is very important to keep your advisors motivated and to keep them striving to learn and improve.” Barbara believes in the value of assessment and stresses the need to use available assessment tools to measure the effectiveness of advising programs.

Technology use in advising

Barbara regards technology as very important to education, SCCC, and her professional practice. As both an advisor and a teacher, Barbara uses technology to

increase her efficiency. She challenges herself to constantly seek out technology to incorporate into advising. She recognizes that technologies such as I-Star and Star Fish allow her to manage student records and track students' progress while technologies such as blogs, Twitter, and Facebook provide students with 24x7 access to information. She described these technologies as a resource for and an enhancement of her professional practice. She claimed, "With the way we're evolving many students feel very comfortable and prefer a type of advising besides face to face." Barbara believes that the increased access to information these technologies give her students helps them make good decisions, make good plans, and to be successful. Barbara describes technology as an enhancer of her professional practice; the external resources she integrates "expand the experience." She celebrates "these incredible technologies" for allowing her to project information to multiple students at once, keeping her from having to repeat herself. Whether she is in the office, in a meeting, or out of town, Barbara is able to communicate information without any interruptions thanks to these enhancing technologies.

Always mindful of keeping students' private information secure, Barbara stresses the importance of separating group and shared advising information from student-specific questions. Student-specific information is not relayed over a communal resource; rather she handles personal things one on one. Another challenge to integrating technology Barbara identifies is "knowing what is out there." She is up for the challenge of staying on top of technology trends in order to provide the best advising possible to her students. Barbara recognizes that technology can be expensive and that securing funding for investments in technology can be daunting. She also

understands the challenge associated with establishing buy-in, but stresses the importance of providing students who may never step on campus with equal services. Recognizing the value added by technology to the advising experience, particularly for distance learners, Barbara still wants to make sure they have the best advising possible and thinks that is still possible because of technology.

Connie's Experience

Connie, a Caucasian female in her fifties, has served as an academic advisor at Pacific Northwest Community College (PNCC) for the last 15 years. She earned a bachelor's degree in business administration and a master's degree in technical and professional writing. She also has professional experience working as an adjunct faculty member for 14 years teaching college-credit classes. Connie currently serves as the lead advisor and coordinator for her campus, a role she has filled for the last 12 years.

Organizational context

A multi-campus institution, PNCC offers advising services at each its four largest campuses. An Advising Coordinator who reports to the Associate Dean of Students provides oversight for each campus. While each campus operates autonomously, the advisors strive to maintain consistency across campuses. PNCC is working toward a one-stop center, but Advising is currently a separate entity. According to Connie, "We're not quite there yet."

Primary responsibilities

Connie considers serving the students and "meeting the needs and demands of her diverse clientele" as her primary responsibility as an academic advisor. She ensures that students get the information they need to make accurate decisions.

Connie advises students with vastly differing reasons for enrolling and advises them accordingly.

Advisors at PNCC are typically not assigned a student caseload and advising is not mandatory for students. However, part of Connie's job is advising a special cohort program. These students represent a very small proportion of the students she advises. According to Connie, any one of the advisors at PNCC can see thousands of students a year. Connie does not see the institution moving toward caseload advising in the future because the advisor-to-student ratio would be too overwhelming.

When describing a typical advising session, Connie provided context regarding her current work environment. At the time of the interview, PNCC was a few weeks into the spring registration period and the advising office was busy. Connie is able to anticipate when the office will be busy based on the cyclical nature of advising and registration activity. Wait times to see an advisor are usually two to three hours during registration, she believes, because students procrastinate and come in at the last minute. During these registration periods, the typical session is relatively brief, usually around 15 minutes. The focus is on addressing immediate concerns based on a variety of needs and providing course advisement for the upcoming term. No long-term planning is provided during this busy time. A discussion regarding students' major, goals, and placement test scores follows to ensure the students are on the right path to help them get "the most bang for their buck." Students who are unsure about their major are advised to take career exploration courses, because helping students choose a major early is a priority for Connie given that students need to be tailoring the first two years toward their end goal. Connie also tries to help students make decisions by

providing additional resources when needed. Advising sessions also include a discussion about problems in current courses. Here Connie helps students see if they can improve their grade before the term is over. This includes offering appropriate interventions and advising students to evaluate the time they devote to homework, use the tutoring center, and request help from the instructor. Finally, Connie encourages students to come back by appointment for more in-depth discussions and follow-up outside of registration periods.

While she does not have an assigned student caseload, Connie has students that specifically seek her out because she worked with them in the past. Often this is by email, asking for repeat assistance with an override or other registration function. PNCC also has a staff directory, but Connie finds it does not work well for students because they do not make the best use of the search engine provided. When students search for “advising,” they generally contact the people whose names are shown first in the results. She said, “We have two advisors whose last names begin with A and they frequently get random solicitations for help.” These students typically end up being transferred once or twice before receiving the help they are seeking. PNCC also employs a general advising email address that is posted throughout the institutional website. An advisor at one of PNCC’s larger campuses handles inquiries sent to this address. While any student can use this general advising email address to ask a question, students who are completing a solely online program receive assistance from the online advisor. Connie has noticed an increase in students’ reliance on email to communicate with advisors and believes that more and more students are using email.

Assistance with overrides is also offered through fax services handled by a part-time advisor who does nothing but process faxes at Connie's campus.

Beliefs about advising

For Connie, NACADA sets the standard of quality academic advising to follow. She stresses the importance of using assessments to better understand where improvements in service can be made. PNCC completed two program reviews, in 2004 and 2011, and established a mission statement and a value statement for advising. Based on results from the 2011 Noel-Levitz survey and student feedback, Connie believes the general impressions of advising have greatly improved since 2004. Connie is a strong advocate for the use of Advising Councils focused on making program improvements and implementing best practices. The Advising Council at PNCC is comprised of all of the coordinators from each campus, one general advisor from each campus, one Perkins advisor, one financial aid specialist, and a dean liaison. Its current purpose is to identify ways to improve consistency in service across campuses and to determine how to provide quality services with less of a wait. While she believes the sheer volume of students forces her to focus on students' immediate, short-term needs and goals, she is hopeful the use of electronic communication will help encourage students to use advising services on an appointment basis throughout non-registration periods. To attract students to see an advisor during quiet times, PNCC also sends out mass emails and announcements through the online student portal.

Anticipating students' needs and helping them with immediate concerns are of primary importance for Connie because "students aren't proactive; they come in at the last minute or they only come in when they have problems." Part of providing quality academic advising, for Connie, includes educating students on how they can make it

easier on themselves in the future by planning ahead. If a student mentions he or she is thinking of majoring in biology, Connie wants makes sure the student knows there is a special science sequence that science majors take. She has reality discussions with students and tends to be frank with them. Empowering students to act on their own behalf and not doing things for the student are also important to Connie. While giving students the tools they need to be independent is one of Connie's goals for advising, it can be difficult for people who are complete novices with computers. She asserted:

It's kind of tough because they need to register, they need to be able to login and check their emails, they need to login to check their financial aid status, and yet they're kind of paralyzed because they're saying, 'I can't, I can't, I can't.'

Connie believes the goal of advising is to provide accurate and timely information to students to save them time and conserve their financial resources. According to Connie, the limitations on funding from the federal government make it even more imperative that students choose an academic path and progress toward completion. She said:

We're really trying to help them chose their major so that while they're here for the two to three years that a lot of students are here for, that they're conserving their financial aid and they're not leaving here \$40,000 in debt, which means they won't have enough money at the university to finish off a bachelor's degree.

The integration of financial aid considerations into academic advising has changed the scope of Connie's job.

Connie's personal experiences with advising have influenced her professional practice. She self-advised throughout her undergraduate education, except for one visit, because she worked at PNCC while attending as a student and had all of the necessary information at her disposal. Even after transferring to a university, she only

met with an advisor once because she felt comfortable reading catalogs and interpreting requirements. Connie believes her experiences at the university help her advise students on what to expect after transferring. She tries to ease the “rude awakening” that comes from “less handholding” at the universities. Perhaps more than her experiences as a student, Connie believes her instructional experience helps her understand what the students are going through and relate to their circumstances. This knowledge of circumstances gained through insight as a teacher helps make her more effective as an advisor.

Despite the overwhelming pressure for timely service from students visiting the office in person, Connie considers following through when promised an exemplary practice. She makes it a top priority to maintain the integrity of her department by responding to all email and phone messages before leaving each day. Her dedication to follow through when promised is something she is proud of and she believes it has a positive impact on the students’ impression of the campus. Her responsiveness and follow-through stand out as exemplary practices to Connie. She asserted, “With the number of students we’re serving, it truly is a balancing act.”

Sometimes Connie feels as though she is going to be “attacked” because students are so eager to see their advisor. That “pressure” Connie describes does not deter her from making students who are calling and emailing her a priority. Connie found that her office logged a total of 16,000 phone, email, fax, and in-person sessions for the previous year and believes managing so many students requires organization and prioritization. She believes her ability to keep up helps students have a good impression of advising.

Technology use in advising

Connie recognizes that technology helps her manage the large number of students she and her colleagues serve each year. To help manage the high volume of students visiting the campus for advising, Connie's campus implemented a pager system. According to Connie, there have been times when all 40 pagers have been checked out, which shows how many students can be waiting in the lobby during the office's busy times. The pagers have helped lessen the number of complaints by making the students feel "connected" even while they wait.

PNCC employs AdvisorTrac as an appointment scheduling tool as well as a login method. All of the advisors see students based on AdvisorTrac's chronological queue; this helps ensure that students are seen in the appropriate order. AdvisorTrac offers the ability to generate log reports, but PNCC does not use this function. PNCC plans to use the log reports to measure wait times and identify the most commonly cited reasons for visiting the advising center during their next program review. Banner, PNCC's student information system, lets Connie access multiples pieces of information about a student, including holds, academic standing, and previous academic history, all within one system. Since integrating ImageNow, an electronic document repository, Connie is able to access digital copies of transcripts instead of relying on other campus departments, which often resulted in delays in service for students. According to Connie, technology has brought about the "age of instant information."

In addition to seeing students face to face, Connie relies on phone and email to communicate with students. While she sees the potential benefits of using Skype and chat rooms, Connie has not had the time to use such technology. She claimed, "It's all I can do to keep up with the students in the lobby." Even during slow registration periods,

Connie's daily schedule is filled with compiling reports, organizing the office, and fulfilling other institutional commitments. She feels there is no downtime to experiment with additional technologies and asserted, "We're just plugging along with the old, low-tech stuff right now."

There are additional challenges associated with trying to integrate technology into quality academic advising. Connie addressed the "dollar crunch" resulting from a reduction in funding from the state. According to her, "There's always the need to do more, better, faster with less resources." Connie does not have the financial resources necessary to invest in technological enhancements. Despite the ability to improve functionality and use, currently employed systems, such as AdvisorTrac, are outdated because upgrades are expensive. However, Connie describes her administration as extremely supportive. Many of the administrators worked in advising before becoming deans, so she feels they understand the needs and concerns of advisors. Connie also sees the program review, which was used as a model for other student service departments, as a reason for having administrative support for new initiatives. She makes sure the advising office exerts more influence, especially pertaining to developing the academic calendar each year to avoid "a bottleneck for services."

Technology is helping to bring Connie's vision of her department becoming a one-stop center closer to a reality by providing advisors with the information they need at their fingertips to offer thorough advising service to students in a single visit. Remembering "the old way of doing things," Connie appreciates the efficiency gains technology brings to advising and claimed, "There's no lag time." No longer is the burden of proof on students; rather, Connie uses online resources like CollegeSource to

access information regarding other institutions' accreditation as well as course sequencing and equivalents. Connie also recognizes the benefits technology has to offer to students. They have the ability to perform college functions, like registration, online and from a convenient location without waiting. Institutional awarding has streamlined the process of graduation so that students do not have to submit paperwork. Additionally, PNCC allows for online registration and automates the evaluation of transfer credits.

Connie helps students develop their independence by demonstrating the tools at their disposal during interactive advising sessions. At Connie's campus, each advisor has two monitors, "one for us to use and one that we can swing around to show the student." Students leave advising sessions feeling empowered and informed and, in that way, Connie believes technology tools have helped advising sessions.

Despite the benefits of integrating technology, Connie is concerned about lack of time. While she believes technology is improving her practice, she struggles with the expectation of keeping advising sessions to a reasonable amount of time given that demonstrating technological tools can be time consuming. She asserted:

It's just that we have access to so much it's how do we keep the advising sessions down to a reasonable amount of time because we could easily spend a half hour to an hour with each student, but we don't have that.

It seems impossible to Connie to meet administration's expectations of what advising should be without affecting the wait time experienced by other students. Adding to this struggle is the lack of computer literacy skills of some students. According to Connie, "It takes time to walk students through the computer if they're not familiar with it already." Connie finds relying on the Orientation Center, where students can get hands-on assistance, helps overcome that challenge.

Connie believes that advisors should capitalize on available technology to facilitate student access to information and services and to enhance the overall advising experience. This includes having a well-designed website as well as using appointment-scheduling software and an electronic check-in process that tracks client volume and services rendered. Connie stresses that advisors must have a suite of technology tools at their disposal, including internal databases, imaging software, document sharing, and electronic forms. Finally, advisors should integrate outside resources and websites, like CollegeSource and u.Select, to assist with the evaluation and articulation of transfer credits.

Deborah's Experience

Deborah, a Caucasian female in her thirties, has served as the lead online academic advisor at Southwestern Community College (SCC) for the last five years. She earned a bachelor's degree in communication with emphasis on interpersonal, intercultural, and mediation. She also has professional experience working as lead for a training team, a distance learning team member, and a liaison/advisor for a children's advocacy agency.

Organizational context

SCC is comprised of six individual schools, each of which includes particular fields of study. Only three of these schools currently have school-specific advisors, but SCC plans to add school-specific advisors to the remaining schools in the near future. There is also the General Advisement office that provides advising services. SCC is pursuing the implementation of mandatory advising for all new students through General Advisement. Additionally, SCC is looking to include faculty in providing advising services for second-year students.

Primary responsibilities

Deborah does not have an assigned student caseload; advising is essentially on a first-come first-served basis. However, any student requests for a specific advisor are honored. General advisement services are offered in person and through email, phone, and online chat. Deborah's primary responsibility is helping students get on an academic path. This begins with career exploration and the identification of a major or field of study. Then Deborah thoroughly reviews program information and helps students develop short- and long-term goals. She also models how to create a course plan and encourages students to develop their own. Her practices are focused on developing empowered, autonomous students ready to contribute to the community and workforce, which she accomplishes through interactive advisement. Deborah consistently provides students with hands-on guidance so they learn how to navigate available tools and resources and become self-sufficient during typical advising sessions.

Deborah finds that the inquiries she receives from students are the same regardless of the method of communication used. She prefers interacting with students face to face to develop a relationship and a rapport. It also makes it easier to verify students' identities and remain in compliance with the Family Educational Rights and Privacy Act (FERPA). However, Deborah recognizes the benefits of communicating through email and online chat, such as the ability to include links to appropriate parts of the website for information regarding student questions. The GoToAssist online chat system that SCC employs also provides a screen-sharing feature so Deborah can walk students through specific processes. Deborah is concerned about the potential for misunderstandings due to the loss of intonation that results from technology-mediated

communication. And while talking over the phone allows Deborah to hear students' intonation, it is difficult not being able to provide a visual to explain things. Deborah tries to use the technology most conducive to each student's situation.

Beliefs about advising

For Deborah, quality academic advising addresses the whole student. She practices active listening, knowing that the students might also talk about personal, difficult circumstances that may help her find additional resources for them. She wants students to feel listened to and appreciated. She paraphrases to check for understanding. Deborah asserted, "We're often the first contact that the student sees, especially with mandatory advisement for brand new students, so that initial contact could set the whole tone for their experience and it helps to be positive and encouraging and supportive." She feels that doing this she makes a lasting impression that motivates students in the long run. Additionally, Deborah helps students to develop critical thinking and decision-making skills so they make informed decisions in their education. This also includes helping students take the initiative to become self-sufficient in achieving their academic goals. Understanding that students live within a larger academic community, she also stresses the importance of appropriate conduct and networking. Ultimately, she strives to get students ready for the workforce and engaged in the community. According to Deborah, empowering students to create their own path of success is the goal of academic advising. In addition to being critical to Deborah's definition of quality advising, student empowerment is a part of SCC's mission. At SCC, students are encouraged to take ownership of their responsibilities and become self-sufficient.

Having only seen an advisor during her final semester of undergraduate school, Deborah remembers her own advisor as “hard to get ahold of, not contactable, and not approachable.” She now strives to provide better service to students by fostering skills she possessed as a student: resourcefulness and self-sufficiency. She believes these skills are valuable to have in the workplace as well. Deborah prefers interactive advisement. She said, “I walk them over and get them onto the computer so that they’re navigating the system; we’re not showing them how, but they’re actually doing it.” The hands-on experience helps Deborah reinforce the idea that certain things are the students’ responsibility. While she also has a swivel arm computer screen that allows her to demonstrate certain tasks while students take notes, she finds some students actually need that extra help. Deborah receives positive feedback from students so she considers that practice as exemplary. As she continues to serve as lead of their training team, Deborah continually emphasizes to other advisors the importance of teaching self-sufficiency to students.

Technology use in advising

Technology plays a large role in Deborah’s professional practice. Given that “everything is online,” she acknowledges the earth-friendly benefits associated with the reduction in paper use. The institutional website serves as the hub and part of Deborah’s responsibilities include knowing where information is so she can advise students accordingly. SCC has online admissions, online registration, an online catalog, an online schedule of classes, and offers online classes. With such widespread reliance on technology, Deborah asserted, “It’s horrendous when it goes down.”

Within her department, Deborah uses a video chat tool, Face Time, as well as instant messaging to communicate with other advisors and seek assistance with specific questions. Given the amount of information that Deborah must know, she appreciates the ability to confer with other advisors to answer students' questions. She claimed, "It's easy to forget some things so you can send an instant message to the entire department and whoever is available to answer will answer." Working between three of the five SCC campuses, she coordinates her calendar and daily schedule using an iPad.

According to Deborah, the influx of students resulted in a two-and-a-half-hour wait during registration periods: "In order to manage our time and the students' time better, we implemented an appointment system." Programmed in-house, this system allows students to schedule their own appointments through their online student portal account. Appointments are scheduled in 20-minute increments. SCC employs AdvisorTrac as a login system and uses its log reports to monitor traffic and wait times. AdvisorTrac also allows advisors to make notations to document what happened during the session resulting in "cohesion" across advisors. She claimed, "Sometimes we get students that like to advisor shop, we call it, to shop for specific answers so that helps with consistency."

Integrating technology provides Deborah with the ability to develop rapport with students even when they cannot come to campus. Having true distance-learning students, she believes technology expands her network. She said, "We're trying to find a way to reach a greater population with a lot of military students based in Afghanistan. So I think it's enabling us to reach more students." Additionally, busy moms and

working people benefit from the variety of ways in which advising services are provided. According to Deborah, “We’re working with the cell phone generation. I mean everything is on their phone, so we may as well use text-alerts and stuff like that. It’s a way to stay in touch anyway.”

Maintaining student’s privacy is a perceived challenge of integrating some technology, specifically Skype, but Deborah is optimistic there are ways to overcome it. When using Skype the students can show their identification, allowing advisors to confirm a student’s identity. Additionally, Deborah expresses concern with the economic challenges her students face and states that many students do not have a computer with reliable Internet connection in their homes. Deborah also expresses concern with the “weird assumption” that advising online is less work than advising face to face. She said:

It’s not the same to some people as having a face-to-face interaction with a student, but I’m still providing the same level of service and they’re asking the same things and so there’s this weird assumption that it doesn’t matter.

Deborah describes administrative pressure to see more students, which she believes comes at the cost of quality interactions with her students. The time constraints imposed on her advising sessions make it harder for her to follow up with students and focus on retention. She does not feel as though 20 minutes is always enough to provide quality academic advising. She said:

Our funding used to be based on the number of students we admitted and enrolled and that has shifted to the number of students we graduate and there’s still this drive and I think it’s more of the business of education – the money, the numbers equal money – but it’s become, you know, let’s shove them through the door, get them in, and it doesn’t allow for the time to follow-up with students and focus on retention and then make sure that they graduate.

Emma's Experience

Emma, a Caucasian female in her twenties, has served as the e-advisor at a South Atlantic Community College (SACC) for the last two years. She earned a bachelor's degree in criminal justice with a minor in psychology and a master's degree in college counseling.

Organizational context

SACC has four campuses that serve approximately 43,000 students, each of which has a counseling office. Depending on the size, each campus is staffed with five to nine full-time advisors. Additionally SACC employs a full-time online admissions advisor, which is the role Emma currently fulfills, and a part-time advisor-on-call. Students are able to reach Emma and the advisor-on-call through SACC's website 24x7.

Primary responsibilities

As the online admissions advisor, Emma's responsibilities are different from those of the academic advisors. She assists prospective and current students, parents, and community patrons with admissions, institutional policies and procedures, academic advising, and financial aid. Academic advisors at SACC help students with academic planning and transfer advising. The advisors do not have an assigned student caseload because of the high number of students they are responsible for advising. She claimed, "We felt that it was better to say just come in and see who you can."

Most of Emma's communication with students is through email and phone. She is surprised by her ability to develop rapport with students without meeting with them face to face. According to Emma, "Usually they'll put out feelers and see who is actually responding to the emails and once they realize, oh my gosh, this is a real person, then

they'll really start really unloading on what their real questions are.” Emma tries to show students she cares. She finds that the students who use the online advising services are not always distance learners. She said, “There is a lot of students, especially the younger generation, that expect to be able to contact someone via email instead of coming to the campus to wait to see an advisor.” Helping students feel comfortable and meeting their expectations and needs is a priority for Emma. Her online services are not only focused on serving distance learners; she is providing services to all students in an online format.

Beliefs about advising

For Emma, students have a story and, by listening closely, she can help educate and empower them to make well-informed decisions about their education. She believes fostering students' sense of responsibility for their lives is critical to quality academic advising. She asserted, “I think as an advisor it's my job to build the foundation for a student to realize that they have control, not only over their education, but also about decisions they make in their lives in general.” The goal of academic advising, according to Emma, is for a student to be informed and empowered. She said:

The last thing I want to do is not give a student information to make an informed decision about a class to take because when you're looking at it from that perspective – if I don't guide the student as far as what class to take and they take a random class, it's not only a waste of time it's a waste of money and that's the last thing I want to do to a student.

Emma remembers always having an interest in course planning. As an undergraduate student, she was required to visit her advisor in order to register for classes, but she self-advised first and was always prepared. She asserted, “So I think

that from an early age I learned that it's important to plan when it comes to academics because you just never know."

Emma also conveyed the importance of taking care of her responsibility for keeping up to date with curriculum and institutional changes in order to be effective in her role. She values keeping students informed so they can understand how today's decisions impact tomorrow's possibilities. According to Emma:

We're the second largest in the state and we offer over 150 different programs and certificates and things are ever changing when it comes to program changes, policies, or procedures so it's extremely important to keep up to date and know what you need to tell a student when it comes to those changes.

Noted as an exemplary practice by Emma, SACC sends out mass communications in the form of emails to keep students aware of changes as well. Emma makes it a top priority to provide accurate information to students. She asserted:

If we provide incorrect information to a student, it could delay a student's future and even affect the student significantly in a financial way; 90% of our students are on some form of financial aid, most of them are on the Pell grant, and the DOE is limiting the number of semesters you can be at a school with Pell grant so the last thing we want to do is waste somebody's time.

Technology use in advising

According to Emma, technology has a significant, positive impact on academic advising. She believes today's students want access to services 24x7 and describes students' comfort with communicating through email as opposed to face to face. Email and webforms are Emma's most relied-upon technologies. She is responsible for responding to inquiries submitted through a general email address posted throughout the institutional website and on promotional materials. Prospective students, parents, and community members usually submit these inquiries. Because she does not have

access to Peoplesoft, the student information system employed by SACC, she relies on printing emails to document exchanges with students. The advisor-on-call responds to inquiries submitted through the webform. Currently enrolled students usually submit their inquiries through the webform. The webform requires students to include their identifying information in order to submit the inquiry so that the advisor-on-call has what she needs to investigate students' situations and respond accordingly. Responses are generally directed back to students' institutional email address for security purposes. She claimed, "That's pretty much where we're at for now." She is optimistic that SACC will integrate the use of Skype or text messaging, as she believes these are tools the younger generation relies on.

To Emma, technology provides a way to offer equal services, in terms of quality, to distance learners. In her opinion, electronic communication tools expand her reach and transcend time, space, and personality types, which may be barriers to students reaching out for and receiving quality academic advising. She said, "I think it's important that the student makes some sort of connection with the campus, or a college, so by providing all of the variety of communication styles that's going to hit most of your population." She believes effective communication is critical for student engagement. Perhaps more importantly, Emma feels technology can make advising more efficient, saving students time and money. With the limited number of advisors available to serve students, wait times can get up to three hours. According to Emma, "You have community college students who work and they have to work to pay rent so you can't tell somebody they have to come in to see an advisor."

Emma recognizes there are challenges associated with integrating technology, specifically establishing administration's buy-in and adhering to FERPA regulations. She asserted, "It's definitely going to take time and a team of people that are dedicated to making this happen for it to happen at SACC." Developing widespread support and overcoming resistance to change, she believes, can be achieved by convincing people of the benefits for students. She stated, "I think once you get to the idea that integrating technology is a good thing, I think everything else would fall into place."

Fran's Experience

Fran, a Caucasian female in her fifties, has served as a faculty counselor at Midwestern B Community College (MBCC), for the last five years. She earned a bachelor's degree in psychology, a master's degree in agency counseling, and a doctoral degree in counseling. She is licensed as a psychologist and a professional clinical counselor with supervision endorsement. She provides clinical supervision for counselors and has worked as an adjunct professor at a neighboring university. She was a board member for a state-level, psychology-related professional organization and specialized in tele-psych guidelines.

Organizational context

Advising services are offered face to face through one of the counseling centers or the enrollment center at MBCC. Students are able to schedule appointments or visit the centers on a walk-in basis. Appointments can be scheduled in person, over the phone, or through the online student portal. MBCC also offers electronic advising in which students submit inquiries using a webform within their online student portal. Responses are also returned through the online student portal.

Primary responsibilities

Fran considers student success her primary responsibility as an academic advisor. For Fran, getting students “on a path” is critical. She then recommends a sequencing of courses and provides interventions when obstacles to persistence arise, including not having sufficient study skills and personal issues. Fran does not have an assigned student caseload. Students on her campus prefer to schedule appointments as opposed to trying to see an advisor on a walk-in basis. She describes other campuses as having a much higher walk-in traffic, she believes, because students do not plan ahead. Fran, along with many of the other MBCC advisors, also teaches student-success courses.

Fran finds that advising sessions vary greatly. She asserted, “I have to be honest, I’m not really sure that there is a typical advising session.” However, she begins each session with a friendly greeting. Her initial focus is on ensuring that the student has chosen a major of best fit by reviewing the academic planner that shows the required coursework. She said, “I might ask a question or two like, ‘What made you pick this major?’ just so I have a sense that it’s a good fit.” She frequently relies on a four-semester sequence academic planner to provide a suggested sequencing of courses. She also advises students that are unsure about their major. To assist with some of these obstacles, MBCC has licensed MyPlan, a career resource that allows students to research colleges, careers, and majors. Fran teaches students how to complete the MyPlan on their own and then uses the results as a platform to begin a career exploration discussion with undecided students.

Fran communicates with students in person, over the phone, and through the webform, but she finds that the types of inquiries differ based on the method of

communication. She distinguishes inquiries received through the e-advising webform as more academically related, whereas the inquiries received in person or over the phone are usually more in-depth and personal.

Beliefs about advising

For Fran, quality academic advising is counseling based and the attending skills she has honed serve her well. She said, “In counseling, it means I’m actually listening to what students are saying and my objective is to respond to what they need, which is sometimes not what they say, which is the difference with attending.” She believes building a comprehensive knowledge base is essential for an effective advisor. She asserted:

The learning curve was surprisingly steep in terms of learning all of the college policies; we have almost 100 different programs here, so learning all of the ins and outs, programs, requirements, college policies, but also having a comprehensive understanding of the world of work.

Fran also maintains that quality customer service is an all-too-often-neglected component of quality academic advising. According to Fran, “We forget that these aren’t just students. These are customers and if we have the mentality that they’re customers then we understand that we have to earn their business.”

Fran uses the words supportive, engaging, informative, and accurate to describe quality academic advising. She expresses a genuine passion for helping students and makes a concerted effort to be upbeat, positive, and engaging while acknowledging the challenge of being responsible for so much information. She feels, “We exist for students.” Fran believes the overall goal of advising is to facilitate the successful completion of an identified career pathway. Having self-advised throughout her own

undergraduate experience, Fran thinks her experiences have helped her professional practice. She said:

I went to five different schools. It took me almost ten years to complete [my degree] and I never talked to an advisor at any one of those schools so I think those experiences help me to help students. I get it.

Technology use in advising

While she does not rely on technology during personal counseling sessions, technology is integrated into the majority of what she does. Her personal computer, the Internet, and email are Fran's most relied-upon technology tools. She readily shares her email address with students so she can serve as an ongoing resource. MBCC does not currently offer online chat so Fran relies on the webform to provide e-advising services to students.

Fran acknowledges the benefits of integrating technology into quality academic advising, such as providing quality service from a distance. Fran provided an illustrative story to describe the convenience technology affords her students. She said:

So how technology helped was that then when he was finished with my class and had moved on, he ended up having some administrative obstacles to overcome and instead of having to come all the way here, all he had to do was email me and I sent him back the paperwork that he needed to complete and scanned everything that he needed to have so it didn't necessitate his having to drive two hours for an appointment.

In addition to providing service from a distance, Fran also appreciates the support technology provides her students. According to Fran, "We are in the information age because of technology and we wouldn't be here without the technology." She encourages students to take advantage of massively open online courses if they are struggling in a course. Technology also allows Fran to collaborate with colleagues easily and efficiently. According to Fran, the e-advising webform is a best practice for

integrating technology into quality academic advising partly due to the quick turnaround time for responses.

Not becoming a slave to technology is also important to Fran. She said, "I'm old enough that I remember what it was like to work without a computer." While she feels that technology enhances her practice, she thinks the ease of communication it offers has increased her workload. She stated, "Never in anyone's wildest dreams did they think they would come into work and have 150 pieces of mail to have to go through and respond to in a day." This is a common occurrence for Fran. She said, "They give us 15-minute increments to catch up on all of the email and it's a losing battle." According to Fran, time is her biggest limitation.

While Fran believes "technology has a significant amount to offer us," she suggests, "We don't want to throw out what we're already doing well." She does not support integrating technology just for the sake of it; rather, she believes that it should only be integrated when it will improve the way things are done. She asserted, "We have to remember to make technology work for us and not make us work for the technology." Refusing to fall victim to the demands of the 24x7 world in which we live, Fran values being present in the moment and in encouraging others to learn to disconnect. According to Fran, "Technology often asks us to be many places at one time as opposed to being where you are now." She also stresses the importance of considering students with disabilities and in complying with requirements set forth by the American with Disabilities Act when offering services. An economic factor Fran acknowledges is that there are students without computer and Internet access and she stresses being accommodating by offering alternatives. Technology also presents Fran

challenges in the classroom as a teacher. She expresses concern with students' inability to discriminate between dependable and unreliable sources. Ethical behavior is also a concern of Fran's based on her belief that academic dishonesty in all of its forms is easier than ever before.

Thematic Analysis

While the experiences of each advisor were unique, there were some commonalities. Commonalities, as well as differences, among the advisors were analyzed to illuminate themes in responses across advisors. These analyses helped to answer the research questions and to provide an understanding of how advisors integrate technology into quality academic advising by employing best practices within the context of their institution and responsibilities, beliefs about advising, as well as their perceptions of technology use.

Institutional Context

Each of the advisors works full time at an open-access and multi-campus community college. Only one of the advisors, Abby, has an assigned student caseload; the other advisors provide advising services to the general student population at large as needed. Abby is also the only advisor to work exclusively with non-local learners, which means she never provides advising services face to face. In a unique description of her role as an advisor, Abby referred to herself as a "coach." Emma also serves in a unique role as an online admissions advisor at SACC, assisting prospective and current students as well as community members with inquiries about multiple facets of the enrollment process.

None of the institutions where the participants work require students to see an advisor. Three of the six institutions offer specialized advising services. Deborah

indicated that SCC was planning to make advising mandatory for new students and to incorporate faculty into advising second-year students. According to Abby, MACC provides advising services based on students' number of credits, enrollment in developmental courses, and instructional modality. Barbara said that SCCC provides advising services based on students' academic major where embedded advisors offer in-depth, program-specific advising. The other three institutions employ a more general advisement organization where students are advised from central locations on each campus.

Professional Responsibilities

Gaining an understanding of what advisors do as part of their professional daily routines provided a baseline understanding of the shared experience of advising community college students. Two main themes emerged from the advisors' responses regarding their primary responsibilities and typical advising sessions: explicit actions and implicit beliefs about their actions (see Figure 4-1). Additionally, three of the advisors also described responsibilities beyond advising students.

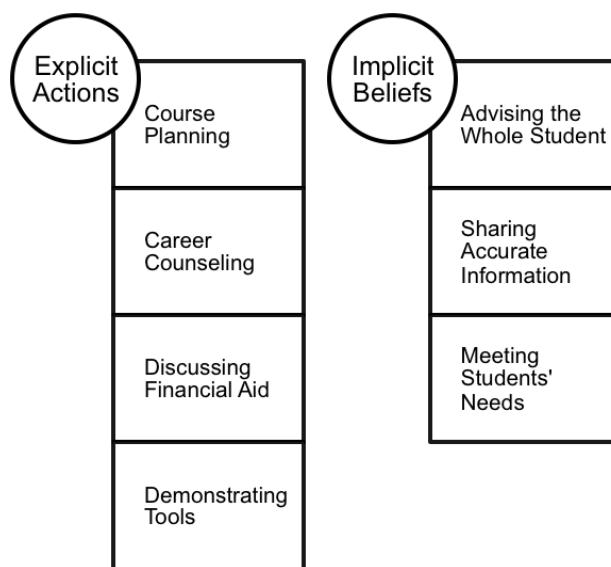


Figure 4-1. Advisors' primary responsibilities

Advisors' explicit actions

The first theme pertains to what the advisors actually do – their explicit actions. This includes program and course planning, career counseling, discussing financial aid, and demonstrating tools. These explicit tasks are included in typical advising sessions, according to Deborah, because “there are definitely key points that we all have to hit on.”

Program and course planning. Five of the six advisors regarded program and course planning as a primary responsibility. This includes providing course and program advising (Abby), reviewing graduation requirements (Barbara), reviewing relevant program information (Deborah), academic planning (Emma), and getting students started on the right sequencing of courses for a particular major of study (Fran). While Connie did not include program and course planning when describing her primary responsibilities, she did indicate that a discussion on appropriate course selection for the upcoming term is included in her typical advising session.

While Connie and Fran claimed there is no typical advising session, five of the six advisors indicated that advising sessions include a discussion about academic and career goals. During this discussion the advisors help students explore career options and associated majors so they can choose the path of best fit. For four of the advisors, academic planning follows this discussion. It is at this time that specific courses are reviewed and a suggested sequencing is developed, which is referred to as a *plan* or a *map*. This plan or map is designed to guide future registration and prevent students from taking unnecessary courses. Abby was the only advisor to regard registering

students as a primary responsibility, which could be due to her caseload of non-local learners.

Career counseling. Some of the advisors work with students who are undecided about their major and uncertain about their desired career. Four advisors mentioned exploring careers and academic programs as a primary responsibility. This includes securing information about careers for students (Barbara), helping students select a major (Deborah), career advising (Emma), and getting students on a path (Fran).

Discussing financial aid. Changing the scope of their roles as advisors, three of the advisors mentioned financial aid resources as a topic of discussion during their typical advising session. Such discussions include topics such as paying for college, financial obligations, minimizing debt, and funding limitations. The advisors also provide students with information regarding out-of-pocket and financial aid options, the Free Application for Federal Student Aid, and additional available scholarships.

Demonstrating tools. Two of the advisors, Deborah and Abby, familiarize students with the available tools and resources during a typical advising session. Deborah considers the demonstration of tools as one of her primary responsibilities. These tools include the online student portal and institutional website. Deborah shows students how to access information and use tools commonly relied on by SCC students. Working exclusively with non-local learners, Abby explains the resources available to online learners at MACC, including online testing, tutoring, and career resources. By demonstrating tools, Abby believes “students understand the system better and understand what questions to ask.”

Advisors' implicit beliefs

Going a step beyond actions, the second theme pertains to the advisors' implicit beliefs about what they do. These beliefs include advising the whole student, sharing accurate information, and meeting students' needs.

Advising the whole student. Approaching advising from a holistic perspective, five of the advisors described advising students on topics other than academics. These topics include outside commitments, potential obstacles to success, and progress in their current courses. Barbara and Deborah help students set goals and make steps toward reaching them. According to Barbara, "I like to assist students and teach them how to make goals and decisions pertaining to their education, career, and personal goals." Abby tries to determine how much time her students are able to devote to schoolwork by asking about work schedules, familial obligations, and time-management skills. No matter the circumstances, the advisors offer interventions in the form of referrals and resources when necessary.

Sharing accurate information. Three advisors included sharing accurate information with students as a primary responsibility. While sharing information is an explicit action, sharing accurate information is a step above that requires the advisors to keep up to date with changes across their institutions. To fulfill that responsibility, Abby's tries "to become an expert" and Barbara and Emma focus on maintaining their knowledge of institutional policies and procedures in addition to academic requirements.

Meeting students' needs. Three of the advisors considered meeting students' needs a primary responsibility. For Barbara, meeting students' needs includes making sure advising services are consistent with students' expectations and are readily available, while Connie adjusts her advising based on the varying purposes students

have for enrolling. She said, “We realize that we have students who are here for the short-term only and they might only be needing retraining.” These advisors serve a diverse population. For example, Emma provides information to prospective students and community members in addition to current students.

Additional duties

In addition to their advising responsibilities, three of the advisors indicated they have additional duties at their institution. Other projects—managing an online course that orients students to their learning management system, maintaining information pertaining to online course curriculum, and reporting distance learning registration figures to the state on behalf of MACC—account for a third of Abby’s responsibilities. In addition to their general advising responsibilities, Barbara and Connie are advisors for specific programs. Additionally, Barbara serves as lead advisor for her campus and advises the students enrolled in five student-success classes.

While each advisor works to fulfill her professional responsibilities, they each described a unique approach to doing that along with goals that guide her interactions with students. These unique approaches, their advising styles, are based on their perceptions of quality in advising.

Quality in Academic Advising

The first research question investigated the advisors’ perceptions of quality academic advising. This investigation provided insight into the underlying and permeating philosophy upon which the advisors base their professional practices. The advisors’ perceptions of quality in advising included their operational definition of quality and their associated behaviors and motivations.

Perceptions of quality in advising

To provide students with quality academic advising, the advisors foster effective interpersonal relationships, strive to meet the needs and expectations of a diverse student population, develop and maintain an accurate knowledge base, view advising as a form of teaching, and foster students' independence through empowering practices (see Figure 4-2). The advisors' definitions and descriptions of quality academic advising are comprised of these five themes. The advisors acknowledged that they strive to provide quality academic advising to students in order to reach their goals for advising.

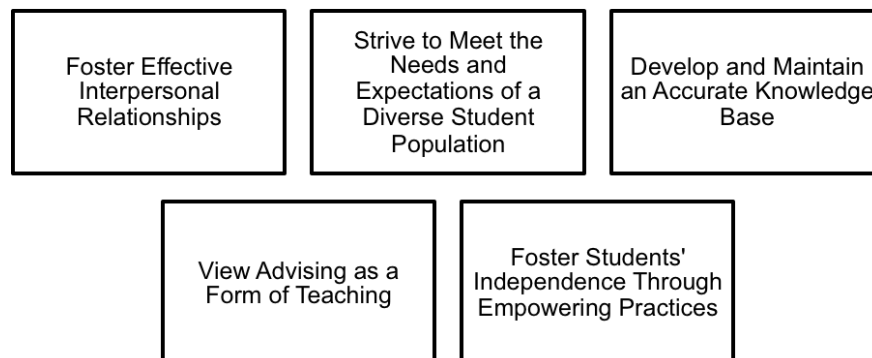


Figure 4-2. How advisors provide students with quality academic advising

Fostering effective interpersonal relationships. Five of the six advisors referenced fostering effective interpersonal relationships with students when describing quality academic advising. The advisors foster relationships by empathizing, listening, attending, and developing rapport with students. Abby stressed the importance of understanding students' circumstances. The other four—Barbara, Deborah, Emma, and Fran—highlighted listening as the first critical step in developing relationships with

students. Barbara thought that by listening she would be less likely to jump to conclusions or misunderstand students. Similarly, attending and listening to students allows Fran to respond to what the students actually need instead of acting on assumptions. She also described an effort to develop rapport with students when she said, "One of the things that I do is I have a very positive attitude and I think it's my responsibility to exude that, to be upbeat, positive, and engaging so I'm friendly." While Connie did not explicitly include the need to develop relationships with her students as a component of quality, she does believe in the importance of giving students reality checks by being "frank" during advising sessions.

Meeting the needs and expectations of a diverse student population. Five advisors regarded meeting the needs and expectations of their diverse student population as a critical component of quality academic advising in addition to a primary responsibility. According to them, student needs can be met by being responsive, understanding the students' goals, minimizing wait times, and providing good customer service.

Abby strives to meet students' need for immediacy by being responsive and "not leaving a student hanging" for more than a business day. She believes retention is at stake and her responsiveness helps maintain the connection between the student and MACC. For Barbara, meeting students' needs means not misinterpreting what students are seeking, which relates back to the value she places on first listening to students in order to understand their goals. Connie strives to minimize wait times for services and addresses students' immediate concerns. She often advises students who wait until the last minute to register or only come to see her when they encounter a problem, so

giving students what they need at the moment is of primary concern. Connie also tries to anticipate students' needs based on their individual goals. Similarly, Deborah listens for meaning behind students' words to help her meet their needs. She believes that students do not always know how to ask for what they need. Part of her effort to achieve quality includes listening for key factors that might give her clues to help her determine how she can help. Understanding the importance of customer service and recognizing that students are customers from which to earn business is how Fran strives to meet students' needs and expectations.

Five of the advisors also work toward meeting students' needs by facilitating timely and successful completion of an academic goal. This includes helping students to develop and evaluate an educational plan, choose a major early, and understand course selections to be made in their major, and generally, to get from where they are to where they want to be. For Fran, advisors exist for students, so facilitating the successful completion of an "identified career pathway" is her primary goal for advising. Ultimately, Abby and Deborah feel prepping students for the workforce is a goal of advising. They believe that students are in school to get a job after graduation.

Developing and maintaining an accurate knowledge base. According to four of the advisors, providing accurate and timely information and services is an explicit goal for advising. This goal influences these advisors' beliefs about quality. Accordingly, four of the advisors referenced developing and maintaining an accurate knowledge base as critical for quality in advising. This knowledge base encompasses academic programs, institutional policies and procedures, the transfer process, the world of work, and additional resources available to students.

Abby, Emma, and Fran feel that being knowledgeable allows them to adequately answer students' questions. They highlight having a broad knowledge base as critical for providing quality academic advising and being a successful advisor. They advise students accordingly so they can make informed decisions about their education.

By providing accurate and timely information, Abby, Connie, and Emma try to ensure that students get a return on their investment in their education. Abby and Emma try to be as thorough and accurate as possible when advising students to avoid wasting their time and money. Connie strives to be "a good steward of taxpayers' money" by helping students understand the importance of minimizing student loan debt and making the best use of their financial aid eligibility while it lasts.

Viewing advising as a form of teaching. The concept of advisors as teachers was included in four advisors' definition of quality academic advising. Barbara, Connie, and Deborah focus on teaching students how to make decisions and set goals. As part of this process, Barbara helps students identify alternatives and consequences in advance and Deborah encourages her students to reflect to gain a better self-understanding. Emma also feels that education is a "huge" component of quality academic advising. She teaches students how to do things for themselves, while also providing them with the information that they need to do so. Apart from the other advisors, Connie teaches students about the advising process itself and encourages them to seek advising during slower times to allow for more in-depth sessions. Each of these advisors sees herself not only as an advisor but also as a teacher. In addition, some of the advisors teach students how to become independent.

Fostering independence through empowering practices. Three advisors included empowering students to take responsibility as a goal of advising. They foster students' independence through empowering practices and consider this a component of quality academic advising. These practices include helping students to understand themselves better in order to make better decisions (Barbara), to be self-sufficient in achieving academic goals (Deborah), to become empowered by learning what they need to know (Emma), and to be independent by demonstrating the use of online tools (Connie). Overcoming students' sense of entitlement for having things done for them and helping to create strong students that take ownership and responsibility for their academic success is how Deborah operationalizes this goal. She asserted:

We work with a little different student population, lower economic backgrounds at the community college, so I want to provide good service to the students but that's a big part of my goal is to help them learn to become self-sufficient so I think that's a god skill to have. It's a skill to possess in the workforce.

Factors influencing perceptions of quality in advising

The advisors reported that quality advising is influenced by several factors: goals for advising, previous experiences, and institutional organization of advising services (see Figure 4-3). These factors are sometimes imposed on the advisors by the institutions, as in the case of the organization of advising services. At other times these factors are self-imposed - a result of the advisor's experiences. Regardless of their origin, these factors play a role in the professional practices of the advisors by shaping how they perceive quality in advising.

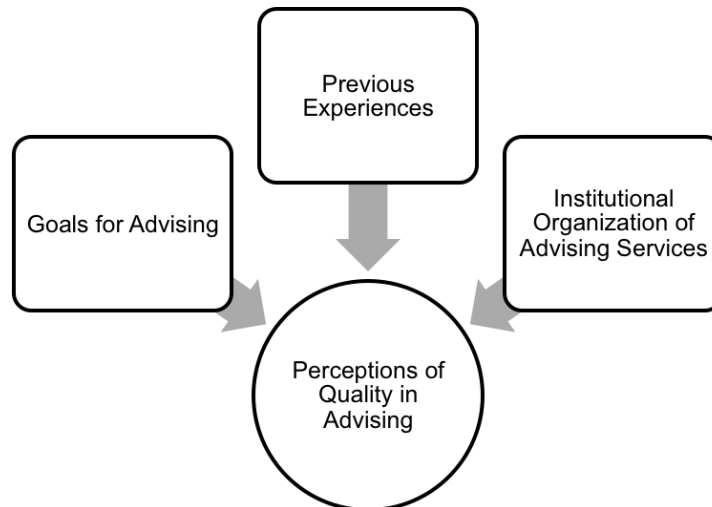


Figure 4-3. Factors influencing advisors' perceptions of quality in advising

Goals for advising. The advisors approach each advising session with specific goals in mind. Attaining these goals serve as the advisors' motivation for providing students with quality academic advising. These goals include facilitating timely and successful completion of an academic goal, providing accurate and timely information and services, ensuring students a return on their investment, and empowering students to take responsibility. According to Emma:

I think quality academic advising is educating students on what they need to know when it comes to academic planning and things regarding the college, empowering the student to realize that it's their decision as to what classes they take, what programs they choose, and what actions they do while they're at schools, and I think a major part of quality in academic advising is listening to a student and hearing what they have to say and hearing their story.

These goals reinforce what the advisors are trying to accomplish when working with students.

Previous experiences. All of the advisors indicated that previous experiences have affected their current professional practice. When explaining the impact of previous experiences with advising on their approach, five of the advisors described

their experiences with advisors as undergraduate students. One advisor recollected a pivotal interaction with a student.

Five of the advisors resorted to self-advising during their undergraduate program. After transferring to a large university, Abby felt as though she “fell through the cracks” so she self-advised until she met with an advisor just before graduation. That advisor encouraged her to pursue graduate school, which led her to become an advisor. Connie worked for the institution while she was a student so she quickly became comfortable with interpreting requirements from the college catalog. She feels those experiences at the university help her better advise students by helping them anticipate what to expect from the transition to a university. Similarly, Deborah was self-sufficient as a student and was able to read the catalog on her own to stay on track for graduation. She described trying to meet with her advisor as an unpleasant experience because the advisor was hard to reach and was unapproachable. She attributes her aspiration to provide good service while encouraging students to be self-sufficient, as she was, a result of that experience. Emma always had an interest in academic planning and making sure she was taking the right classes. She learned early on the importance of planning and now tries to teach that lesson to her students. Having self-advised at five institutions and taking 10 years to complete her bachelor’s degree, Fran thinks her experiences help her better understand students.

As opposed to describing a personal experience with an advisor as a student, Barbara recollected a pivotal moment during an interaction with a student. She said this interaction had the greatest impact on her professional practice. This connection with a

student reinforced the importance of her role as advisor and helped her think of advising as a career instead of just a job.

Organization of advising services. The organization of advising services, specifically caseload versus walk-in advising, affects the advisors' perceptions of what quality advising is and whether they feel they are able to provide it. Abby is the only advisor to work solely with an assigned student caseload. She values holistic, proactive advising to avoid letting students "fall through the cracks" as she feels she did as a student. Connie, on the other hand, said, "We're a huge, huge college and I don't foresee us doing caseload advising to the general population anytime soon simply because of the numbers." During busy times within this type of setup, Connie has a more reactive approach addressing only immediate concerns and questions.

Manifestations of quality in advising

To determine how advisors provide their students with quality advising, supported best practices were also investigated. Interestingly, these best practices were manifestations of the advisors' perceptions of quality in advising.

When the advisors were asked to share an exemplary advising practice, they shared support for being responsive, implementing a first-year program, creating an advising council, empowering students, and setting a positive tone for the experience. Interestingly, no advisor referenced a form or use of technology as a best practice until prompted by an additional interview question. Instead advisors referenced practices that closely aligned with their personal definition of quality academic advising and met their goals for advising. These best practices require the advisors to:

- **Be responsive.** In congruence with their definition of quality, Abby and Connie referenced taking the time to be responsive as an exemplary practice. Abby tries to respond within one business day to provide students with the information they

need to move forward in the enrollment process. She stresses the importance of overcoming staffing challenges when necessary to be responsive. Connie thinks her follow-through encourages students to believe that advisors are dependable, which maintains the integrity of the entire advising department. Accordingly, she responds to all phone messages and emails before leaving the office each day.

- **Set the tone for a positive experience.** In accordance with their focus on developing effective relationships with students, Barbara, Deborah, and Fran cited taking the time necessary to set the tone for a positive experience as an exemplary practice. Barbara suggested letting students know what they can expect from advising services, which includes sharing the department's philosophy of advising. Deborah recognized that advisors are often the first contact students have with the institution. As a result, she tries to make a positive lasting impression on students by being encouraging and supportive. Exemplary practice is all about attitude for Fran. This includes being friendly, supportive, and engaging while providing her students with accurate information.
- **Empower students.** Deborah highlighted interactive advisement as an exemplary practice. To achieve this, she provides students with hands-on experience as she walks them through important processes and navigation of relied on tools. Deborah also included overcoming students' resistance to doing things for themselves as a component of this best practice. According to Deborah, some students need this one-on-one time that goes beyond demonstration and is a worthwhile extra step that advisors should take. Similarly, Emma referenced empowering students as an exemplary practice, but in the sense that advisors must provide students with information regarding changes or updates pertinent to their course of study. Emma empowers students by helping them realize they have control over their own decisions in their academic and personal lives. Deborah had a similar sentiment, indicating maintaining an understanding of ongoing changes at the institution as an exemplary practice. They agree that students need to be kept up to date in order to continue their progress toward degree completion.
- **Create an advising council.** Connie suggests creating an advising council responsible for evaluating and assessing services to suggest data-driven improvements to advising services. These councils should include representation from each area of student services at each campus (if applicable) as well as administration and faculty.
- **Implement a first-year program.** Barbara supports the implementation of a first-year advising program that ensures all new students meet with an advisor during their first semester.

While the use of technology was not included in their supported best practices, the advisors described how they saw technology fitting into their professional practices.

Beliefs about Technology Use in Advising

All six of the advisors value the use of technology. Three major themes emerged in the advisors' responses regarding their beliefs about technology. First, they discussed how they use technology, including specific tools and their purposes. Second, they referenced challenges by describing personal and contextual impediments to integrating technology. Third, the advisors described how technology is changing how they do business by explaining why they use it despite these challenges and followed this by the perceived benefits.

How advisors use technology

The second research question investigated how advisors are currently using technology in quality academic advising. All of the advisors included the use of technology when describing their day-to-day experiences. Four themes emerged from advisors' responses regarding how they use technology. The advisors use technology to communicate, to manage student information, to manage office traffic, and to integrate outside resources. Table 4-1 shows how each advisor uses technology within these four themes.

Table 4-1. Advisors' use of technology

	To communicate	To manage student information	To manage office traffic	To integrate outside resources
Abby	x	x		x
Barbara	x	x		x
Connie	x	x	x	x
Deborah	x	x	x	
Emma	x		x	
Fran	x	x	x	x

To communicate. According to all six of the advisors, technology offers methods of convenient and comfortable communication and, as a result, is changing

how they advise. While the majority of the advisors cited the ease of communicating with students, Emma and Fran also regarded the use of instant messaging and email as efficient ways to communicate and collaborate with colleagues.

Thanks to technology, the advisors can convey important information to multiple students at once 24x7. Barbara appreciates that students no longer have to come to campus and wait in line for advising since she is able to communicate with her students without interruption through technology. Also recognizing that she must be available to students not visiting the campus in person, Deborah appreciates technology for providing her with new ways of reaching students. Both Deborah and Emma believe technology expands the reach of advising services by providing alternative ways of administering advising to face to face. According to Emma,

With email, we're able to provide students with service in a 24x7 fashion. I think we're reaching more students than we ever have before and I think that with the limit, because we really do have a limited number of actual advisors on each campus so during registration time it's not unheard of that a student sits there and waits to see an advisor for three hours. That's something that our institution definitely needs to take a serious look at and evaluate.

This convenience of communication allows the advisors to reach more students than ever before, overcome staffing challenges, and provides busy students who work during normal business hours with advising services.

Technology provides the advisors with a convenient method of communication with which students are comfortable. Deborah supports using technology to keep in touch with students and suggests using the technology they use to be most effective. Connie and Emma believe email is the preferred method of communication among the younger generation and that they are more comfortable communicating through email. Emma values offering a variety of communication methods to students and appreciates

technology for affording such a variety. All six of the advisors expressed heavy reliance on email for various purposes, including follow-up, announcements, and advising.

While email was the most cited tool, the advisors also mentioned other technologies they use to communicate with students. Synchronous communication tools provide students with feedback from the advisors without delay. Three of the advisors indicated they use the phone to advise students. One of those advisors, Abby, said she thought phone conversations were more appropriate than emails to discuss certain things. Fran, on the other hand, indicated she very rarely received phone calls from students. Three advisors, including Abby, used online chat to synchronously communicate with students. Abby was excited that MACC was integrating Adobe Connect to offer an advising experience that closely resembles face-to-face interactions to her non-local learners. Likewise, Connie and Emma mentioned Skype as a tool they would like to see used by advisors more frequently at their institutions.

Asynchronous communication tools provide students with the opportunity to submit inquiries 24x7 and allow time for advisors to respond. Two advisors, Deborah and Emma, were optimistic about the use of text messaging by their advising units, believing that students rely more heavily on mobile technology. Webforms were mentioned by two of the advisors as a way to remotely advise students. These forms allow students to submit requests for advising services through the school's website and are sent to an advisor for processing. Fran highlighted webforms as an exemplary practice given that most inquiries submitted via webform at MBCC are responded to within 24 business hours. Different from the other advisors, Connie receives advising inquiries by facsimile. These requests usually pertain to overrides for registration.

Barbara is the only advisor who employs social media to communicate with her students. Twitter, Facebook, and blogs allow her to share information with multiple students at one time.

To manage student information. Technology provides advisors with tools to help manage student information. Technology keeps everyone on the same page by allowing advisors to share information with one another, which leads to more consistency in service for students. With everything in one spot, information is consolidated and easy to access for advisors and students.

Five advisors referenced technology that allows them to electronically manage student information and maintain student records. They mentioned their appreciation for the streamlined electronic record keeping that student information systems provide. The use of ImageNow, imaging software used to create and store electronic records, helps Connie provide thorough advising without having to rely on other campus departments for information. Creating a history, or permanence of advising exchanges, was a reason Abby referenced for using technology. She said it allows for continuity in service despite an advisor's absence because students' advising histories are stored and accessible to other advisors. The advisors use student information systems and case management software including AdvisorTrac, Banner, I-Star, PeopleSoft, and SSP. According to four advisors, students benefit from technology integration, specifically online student portals. These portals provide them with ongoing online access to their personal records as well as tools and resources necessary as enrolled students, including registration.

To manage office traffic. Four advisors mentioned the use of technology for office traffic management. Appointment scheduling software, such as AdvisorTrac, and pagers help Connie and the other advisors at PNCC manage the large volume of students walking in and scheduling appointments for advising. Similarly, Emma described an update to SACC's system that will allow students to schedule their own advising appointments from their online student portal. She was looking forward to the benefits of appointment scheduling, having been programmed in-house, that was free from manual data entry. According to Deborah and Fran, their institutions already offer students the opportunity to schedule advising appointments from their portal. Connie's campus uses pagers to ensure that students are seen in order and AdvisorTrac to facilitate students' signing in once they arrive on campus to see an advisor. She said these technologies have helped to lessen the number of complaints.

To include outside resources. Four of the six advisors used technology to integrate outside resources into their professional practices. Two advisors regarded career resource platforms as technology useful in helping them guide students' career exploration. According to Abby, MACC recently signed a contract with Career Coach, a career resource platform that will help students research potential careers based on certain majors. This resource also provides information about graduate programs and the local job market. According to Fran, MBCC licenses MyPlan to help students explore potential majors and careers of best fit based on a myriad of factors. Both advisors cited the benefits of such tools in improving their ability to offer career advice. Barbara appreciates the expansion of the experience provided to her students as a result of integrating outside resources. She said, "I think it's just an enhancer. It also

allows me to bring in new resources beside just myself 24 hours a day, different websites, different information.” Connie also appreciates having information at her fingertips through the use of outside resources. When discussing students’ transfer credits and previous school’s accreditation, she can rely on credible sources on the Internet taking the burden of proof off of the students.

The use of technology permeates the advisors’ daily interactions with students and has become heavily relied on. After exploring how the advisors use technology, the researcher sought an understanding of the advisors’ underlying beliefs about the use of technology in quality academic advising, specifically the associated challenges and benefits as well as associated best practices.

Challenges to using technology

The third research question investigated the advisors’ perceptions of using technology in quality academic advising. Two main themes emerged across the advisors’ responses: challenges to and benefits of using technology. This section will discuss the advisors’ perceived challenges and the next section will discuss their perceived benefits.

The advisors acknowledged that the use of technology is not without challenges. Five themes emerged in the advisors’ responses regarding the challenges to integrating technology: more technology means more work, technology is time consuming, some students lack computer competency, technology is expensive, and technology is not always popular. Table 4-2 reflects the challenges experienced by each advisor.

Table 4-2. Challenges to integrating technology

	More work	Time consuming	Lack of tech skills	Expensive	Not popular
Abby					x
Barbara	x			x	x
Connie		x	x	x	
Deborah	x	x	x	x	
Emma					x
Fran	x		x		

More technology means more work. For four of the advisors, more technology meant more work. Barbara expressed concern with having to know what technology is available as well as keeping up with what technology students are using. Deborah mentioned that advisors already feel overworked and Fran followed suit by mentioning how reliance on email has dramatically increased the amount of mail to respond to in a day. In addition to having to impart information to students regarding institutional policies and procedures and academic programs and majors, advisors must also ensure that students know how to use the relied-on tools.

Technology is time consuming. Two advisors referenced the time-consuming nature of technology. Given that demonstration of the tools takes time, it is becoming increasingly difficult for Connie and Deborah to keep appointments down to what administration considers a reasonable amount of time. Connie said:

We can only do what time allows and then defer the rest to the quieter times and hope that students will take advantage of advising by appointment. So to me, that's the only problem with integrating technology. You're giving me so many tools, but it's just making the advising sessions longer.

Teaching the technology, in addition to fulfilling their other responsibilities as advisors, takes time and some students require more hand holding than they have time to

provide. Deborah alluded to challenges associated with temporary technical failures and the negative impact such disconnections have on her ability to advise students.

Some students lack computer competency. Three advisors expressed concern with some students' lack of computer competency. Often working with students from lower socioeconomic backgrounds and or those who have not grown up using technology as part of their daily lives, Connie, Deborah, and Fran understand that some students need help becoming literate with the available technology. They know that not all students have reliable access to a computer or the Internet. According to the advisors, this is frustrating the students and the advisors. The large gap in skill between those students comfortable with the tools and those who struggle to use a mouse contributes to the time-consuming nature of technology for these advisors.

Technology is expensive. Three advisors cited funding and budgetary constraints as a challenge to integrating more technology. Understanding that investments in technology can be expensive, Barbara, Connie, and Deborah described how the changes in funding affect the ability to integrate some technology. Connie and Deborah cited specific examples such as an expected budget cut for the upcoming academic year and a change in how funding is calculated.

Technology is not always popular. Establishing widespread acceptance and buy-in is another challenge according to three of the advisors. They are particularly concerned with convincing the decision makers at the administrative level of the benefits associated with using technology. Emma asserted:

I think at any institution you have to jump through hoops to make any kind of change, especially when it comes to technology. I don't think that everybody is quite on board with the idea that students need technology. They think they should just come in. I think once you get to the idea that

integrating technology is a good thing, I think everything else will fall into place.

Three advisors also felt the development and adoption of supportive practices were challenges. Abby addressed ensuring appropriate use of technology by advisors, Connie urged for more realistic expectations from administration, and Emma stressed the importance of putting supportive policies in place. Emma also emphasized the importance of maintaining compliance with FERPA regulations to ensure the security of students' private information when advising students using technology. Deborah agreed when she said:

I mean we have to follow FERPA and make sure we're very careful with that, which is why it's part of our mission to incorporate technology so we're always looking for new ways to reach students. Something like Skype we may be able to then have the student hold up their ID to the camera and we can see their face and see it's them so that may help with some of that.

Uniquely, Deborah described her struggle with her coworkers' perception of online advising as a challenge. She feels that other advisors perceive online advising as less work than seeing students face to face. According to Fran, technology often asks people to be in multiple places at once and her challenge, and the challenge she poses to her students, is to be present in the moment by making technology do the work.

Why advisors use technology

Despite these challenges, the advisors use technology in their professional practice because of its benefits. Advisors and students experience easier access to information, a greater efficiency of service, and an expansion to and enhancement of the experience. Technology is "abundant" (Deborah), "beneficial" (Abby), and

“increasingly important as education continues to evolve” (Barbara). All of the advisors believe that technology is changing the way they advise students.

To ease access to information. According to three of the advisors, information is readily available and easily accessible because of technology. Deborah appreciates the fact that “everything is online now” and much of the information advisors and students need to know is available on the school’s website and the Internet. Connie asserted, “Having information at our fingertips on our actual desktop is huge. For those of us who have been here forever, we remember the old ways of doing things.”

According to four of the six advisors, technology integration results in students being more informed. Online student portals provide a convenient consolidation of resources for students. Barbara believes that the use of technology helps students overcome challenges and make more informed decisions by increasing their access to information as well as advising.

By using technology to communicate with her students, Emma believes she is reaching more students and providing them with information they need. Apart from the other advisors, Fran encourages the use of massively open online courses among students who are struggling in a particular course as a way to strengthen their knowledge and skillset.

To provide greater efficiency of service. This ease of access to information results in a greater efficiency of service according to five of the advisors. Processes are more efficient, according to Connie and Emma, which results in reduced wait times experienced by students. Fran also saves students’ time by offering her advising services from a distance by using technology. Many processes are automated through

technology, minimizing the need for students to file paperwork. Deborah also highlighted this reduction of paper as a benefit of integrating technology in that it reduces waste and aligns with her institution's mission to become more eco-friendly.

With greater access to information, Connie asserted:

Students come in and where we used to have to depend on other departments for information, now with all of these applications loaded on our own individual computers networked together, I can look at a student's transcripts, I can bring up CollegeSource to check course descriptions from a school they took a course at, see if it's equivalent, I can check the accreditation of another college if I'm not familiar with it, so the students can really get served without us having to say, 'Hey, I need to research this and get back to you.' Technology has helped us come closer to that one-stop where we can really have the dictionary and thesaurus at our disposal; we can look up what we need and give a ready answer.

To expand and enhance the advising experience. Three of the advisors described how the use of technology results in an overall expansion of and enhancement to the advising experience. Barbara uses technology as a resource and to enhance her professional practice. She engages students in the advising process by using outside resources and embedding links within emails. She feels technology allows her to provide quality advising even to students who may never set foot on campus. Connie feels confident that students leave her office more informed as a result of her ability to demonstrate tools and resources by using multiple computer monitors.

Emma said:

I use technology first off as a resource and then as an enhancement to my advising. They are utilized as a way to get information out to reach them, to actually have this information accessible 24 hours a day. So I mean it's basically there to enhance, engage the advising process. With the way we're evolving, many students feel very comfortable and prefer a type of advising besides face to face.

The benefits that technology affords allow the advisors to meet their goals for advising by providing quality advising to students. Technology is not changing what the advisors do daily; technology is changing some of the ways in which they do it.

Best Practices for Integrating Technology

The fourth research question investigated what advisors consider to be best practices for integrating technology into quality academic advising. As previously mentioned, no advisor referenced a form or use of technology as a best practice until prompted. Advisors, instead, view technology as a beneficial tool for helping them meet their goals for advising and provide quality academic advising.

Three of the advisors included the use of email as a best practice in using technology in advising because of its convenience. The advisors also offered suggestions for ways to use of technology in quality academic advising:

- **Provide a well-designed, robust institutional website.** Advisors and students heavily rely on the institution's website and it should provide all of the necessary resources and information. Abby, Connie, and Deborah assert that such a website is essential to meet the needs of today's students. Navigation should be streamlined and intuitive. Students should have access to an online student portal that houses their personal and academic information. Moving admissions, registration, class schedules, and catalogs from paper to online will be more economical as a result of the paper saved.
- **Provide an online student portal.** Providing students with ongoing access to their student records, online student portals provide certain services available 24x7. Abby and Deborah consider online student portals to be an exemplary use of technology for advising and encourage students to become familiar with the tools and resources organized within them. Online student portals are gateways through which students can access registration, transcripts, and other important academic records.
- **Explore tools that will add value to the advising experience.** While three of the advisors mentioned the use of email as a best practice for using technology in advising, suggestions were also made for integrating other tools like Adobe Connect, appointment scheduling software, text messaging, and Skype to enhance the advising experience. Emma urged advisors and institutions to

evaluate students' use of technology first to ensure a match between advisors' and students' use.

- **Implement the use of webforms.** Considered a best practice by Fran, webforms allow students to submit inquiries or requests for advising around the clock. Submitted through students' online portal, they are compliant with federal guidelines regarding student privacy because responses are also sent back to the portal.

Summary of Findings

Quality academic advising is a complex exchange between an advisor and student influenced by many factors including institutional context, professional responsibilities, goals for advising, and previous experiences. Exploring advisors' beliefs about advising allowed for the investigation of their philosophy of advising, specifically their definition of quality in advising, which they operationalize in their professional practices. The advisors approach each advising session with specific goals in mind, which guide the advisors when advising students. These goals influence advisors' beliefs about quality. The advisors employ best practices based on their beliefs about quality and that help reach their goals for advising.

Technology is heavily relied on by the advisors, but not included in their identified best practices in quality advising. However, it was apparent from the advisors' responses that their, as well as students', use of technology is changing their definition of quality in advising and associated best practices. The advisors use technology as a way to offer quality services in order to meet the goals for advising. They use technology to communicate, manage student information, manage office traffic, and integrate outside resources. They perceive the use of technology as a way to ease access to information, provide a greater efficiency of service, and to enhance the advising experience. Technology provides the advisors with tools to provide quality

academic advising to students. However, integrating technology is not without its challenges. According to the advisors, integrating technology creates more work and is time consuming, expensive, and not always popular. In addition, the gaps in computer skill levels among students create an additional challenge for advisors. Regardless of these challenges, the advisors place a high value on the use of technology in their professional practices and are optimistic for future implementations of technology that add value to the advising experience for advisors and students alike.

CHAPTER 5 DISCUSSION

This study investigated academic advising through the eyes of community college advisors by qualitatively exploring advisors' perceptions of the use of technology in quality academic advising and how it is impacting their professional practices. Furthermore, the researcher sought to discover what community college advisors perceive as challenges and benefits to such integration as well their associated best practices.

The following research questions guided this study: In what ways, if any, is technology integrated into quality academic advising in the context of community college advisors' philosophy and definition of quality academic advising? a) What are advisors' perceptions of quality academic advising? b) How are advisors currently using technology in quality academic advising? c) What are advisors' perceptions of using technology in quality academic advising? d) What do advisors consider to be best practices for integrating technology into quality academic advising?

The analyses of data collected from interviews with six community college advisors were presented in Chapter 4. This chapter discusses these results beginning with the advisors' perceptions of quality as related to previous research. Next, the advisors' perceptions of using technology in quality academic advising situated within previous research are discussed. A discussion of the implications these results have on policy and practice will follow, including promising practices and institutional factors that must be in place to support these practices. This chapter will conclude with recommendations for additional research on the use of technology in quality academic advising.

Discussion of the Findings

To explore community college advisors' use of technology in quality academic advising, it was a critical first step to explore their perceptions of quality in advising, including their associated beliefs, motivations, and behaviors. However, quality academic advising proved to be a complex, multi-faceted phenomenon to study. This study revealed that advisors rely heavily on technology when providing students with quality advising services in their professional practice.

The high-touch profession of academic advising is being impacted by advisors' and students' use of technology. While technology is not changing most of what the advisors do, it is dramatically changing how they do it. The advisors use technology when advising students while prioritizing the personalization of academic advising believing that quality academic advising is about people not technology. Based on the data in this study, the advisors feel they are able to provide quality academic advising more efficiently because of technology and they appreciate the benefits it affords.

The advisors still rely on their attending and communication skills to foster relationships with students. Listening for understanding and concentrating on students' individual needs, the advisors remain dedicated to a personalized, high-touch approach to advising. They still help students explore careers, plan courses, understand financial aid, and set goals by fostering relationships and maintaining an accurate knowledge base. However, technology is changing how they do this. Advisors integrate technology into advising because of the benefits it affords. Technology makes accessing information easier and allows advisors to enhance the advising experience for students. Technology allows advisors to become more efficient. In other words, technology has become a vehicle for advising. In addition, students have needed to

become proficient in the use of tools as a result of institutions' reliance on technology in all aspects of the matriculation process. This institutional reliance on technology necessitates advisors taking on the additional role of technical expert and demonstrator of tools adding to the already complex role of community college advisor.

Advisors' Perceptions of Quality Academic Advising

The first research question in this study focused on advisors' perceptions of quality in academic advising. The advisors' behaviors associated with providing quality advising included fostering effective interpersonal relationships, meeting the needs and expectations of a diverse student population, developing and maintaining an accurate knowledge base, approaching advising as a form of teaching, and fostering independence through empowering practices. These findings are discussed in the context of previous research below.

Technology, while heavily relied on, is secondary in the advisors' consideration for providing quality advising to their students. These findings support Heiberger and Harper's (2008) assertion that technology itself is of little importance. Rather, what the technology allows the advisor to do is important. Guided by their goals for advising, their professional responsibilities, and their previous experiences, the advisors shared manifestations of their perceptions of quality in the form of best practices.

Behaviors associated with quality advising

The advisors cited fostering effective interpersonal relationships with students as a critical component of quality academic advising. They do this by personalizing advising, as suggested by Smith (2005), and by offering individualized advising in a caring way, as suggested by Cheng (2004). The advisors believe that quality academic advising takes students' feelings into account and is about connection. Astin (1984)

and Habley (2004) asserted that the relationship between advisor and student also fosters a sense of community and engagement within the institution at large.

Technology can help by providing advisors and students with convenient ways of communicating with one another (Gordon, 2006; Habley, 2004; Heiberger & Harper, 2008; Steele & Carter, 2002).

The concept of academic advising as a form of teaching is well supported throughout the research literature (Crookston, 1972; Ender, Winston, & Miller, 1984; Frost, 2000; Ryan, 1992). Several advisors in this study alluded to their advising roles as a form of teaching. Supporting NACADA's (2006) assertion that "academic advising, based in the teaching and learning mission of higher education, is a series of intentional interactions with a curriculum, a pedagogy, and a set of student learning outcomes" (para. 10), these advisors viewed themselves as teachers as well as advisors.

The data in this study also showed that advisors' and students' reliance on technology has resulted in a new component critical to providing quality academic advising: fostering student independence through empowering practices. This distinctive characteristic adds to Allen and Smith's (2008) definition of quality academic advising. The advisors feel responsible for demonstrating these tools in addition to their other responsibilities. Accordingly, they reference empowering practices associated with helping students become self-sufficient in their use of the tools commonly used by enrolled students as exemplary. While evidence of this concept could not be found in the research literature, it does correlate with the cited benefit of efficiency brought about by the use of technology (Habley, 2004; Multari, 2004). Because of technology,

students are equipped to perform academic functions on their own behalf, including registering for classes and reviewing their degree audits.

Motivations for providing quality advising

According to the advisors in this study, increasing institutional retention is a motivation for providing quality academic advising. Noel (1978) also found that whether or not students' academic advising needs are met affects their decision to stay enrolled. In support of previous research, the advisors believe they have a positive effect on institutional retention (Crockett, 1978; Cuseo, 2003; Glennen, 1996; Metzner, 1989; Tinto, 1999) and students' college experience (Pascarella & Terezini, 1991) by providing quality academic advising. The advisors in this study feel technology helps them to meet students' needs and to be responsive by providing convenient methods of communication congruent with students' preferences.

CAS and NACADA (2008) recommend helping students develop a better self-understanding. The advisors in this study also stressed the importance of helping students develop decision-making skills as well as the ability to set goals based on their belief that this ability would help them during and after their college experience.

What advisors need to provide quality advising

According to four of the six advisors, quality academic advising requires knowledge of curriculum, institutional policies, tools and resources, as well as the world of work to adequately and accurately address students' questions and concerns. Developing knowledge about degree requirements and institutional policies and procedures was also emphasized in previous research (Allen & Smith, 2008; Harrison, 2009; Willis-Haslip, 2011) as a requirement for providing quality academic advising. In this study, the advisors felt their ability to provide quality academic advising depends on

the knowledge base they persistently strive to develop and maintain. Technology helps advisors fulfill this responsibility by easing access to information. Through technology, advisors have the information needed to provide students with well-researched answers at their fingertips. This allows the advisors to continually develop their knowledge base.

Factors influencing perceptions of quality

The advisors' beliefs about quality advising are influenced by their previous experiences and educational background, goals and beliefs, as well as the organizational and administrative structure within which they work.

Previous experiences and educational background. Each of the advisors in this study entered the academic advising profession with personal experiences with advising. These previous experiences affect the advisors' current professional practices. Interestingly, all advisors interviewed for this study indicated that they self-advised throughout their own academic tenure. In some cases, the advisors learned how not to be as an advisor from negative experiences.

For the majority of the advisors, their operational definition of quality academic advising closely resembled their educational background and professional training. This supports Hagen's (2005) finding that educational background influences advisors' approach to advising. The advisors in this study with counseling backgrounds stressed the importance of building rapport and establishing relationships with their students while those with training in communication stressed how the loss of intonation can result in lost meaning within a message. It was evident that advisors' education has a profound effect on the way they provide service to students.

Goals for advising. The advisors' goals for advising influence their beliefs about quality academic advising. In this study, advisors' goals included facilitating

timely and successful completion of an academic goal, providing accurate and timely information and services, ensuring students a return on their investment, and empowering students to take responsibility. The advisors' goals for academic advising are very similar to those created by NACADA and CAS (2008), which are:

- To help students gain a better self-understanding;
- To help students understand the world of work and how they fit within it;
- To help students develop an educational plan to reach their career goal;
- To provide accurate information about institutional policies, procedures, resources, and programs and provide referrals when necessary;
- To help students evaluate their progress toward their goals by serving as an ongoing contact.

The advisors' goals for advising explain why they strive to provide quality advising by revealing their underlying motivations. The advisors believe they are responsible for advising the whole student, sharing accurate information, and meeting students' needs. These responsibilities somewhat overlap with the goals for academic advising created by NACADA and CAS (2008) as well as O'Banion's (1972) five stages for the community college advising process.

Organizational and administrative structure. Biggs, Brodie, and Barnhart (1975) found that large caseloads lead to more dissatisfaction among advisors with their professional roles. When speaking with the advisors who advise the general student population within a first-come first-served structure, it was easy to tell they seemed stretched thin. However, when speaking with Abby, who was responsible for working with an assigned student caseload of 90 to 120 students, there was an overarching calmness to her approach. Overall, the organizational structure and administration of

academic advising services dramatically affects advisors' beliefs about and approach to advising.

Administrative pressure to keep advising sessions concise and wait times brief is, at times, counterproductive to the advisors' effort to provide quality advising to students. There is a disconnection between administration's expectations for service and the time needed to provide such service, weakening advising services and damaging institution-wide morale. This is similar to Solis' (2012) finding that institutional morale is lowered when an administration lacks empathy and understanding.

How Advisors Use Technology

The second research question in this study investigated how advisors use technology for quality in academic advising. Advisors have always served in multiple roles working with students as coaches, mentors, teachers, and career counselors. Barnes and Austin (2009) asserted that these roles included serving as a collaborator, mentor, and advocate. Providing academic advising, admissions and transfer advising, financial aid advising, and career advising services, community college advisors wear many hats in order to meet the needs of a diverse student population. The additional role as technical expert/demonstrator of tools adds to this already complex role of a community college advisor. According to the advisors, they are responsible for teaching students to use the technology while overcoming any resistance to being self-sufficient.

To fulfill their roles as collaborators, mentors, and advocates, community college advisors serve students in two distinct ways. They confirm the choices of those students that are on the best-fit path leading to the achievement of their academic and life goals. They also lead students to rethink their choices helping them to formulate new goals. While technology aids advisors in both efforts, it is perhaps most useful in

providing undecided students, or those interested in exploring alternative pathways, the tools and information they need to make important decisions that will impact their future. Advisors should help students reevaluate their academic choices and goals throughout their academic tenure to ensure they align with their professional and life goals. Similarly, Schreiner and Anderson's (2005) found that students are inspired by advisors who help them set goals and build action plans based on inherent talents and interests. For advisors, helping students find the career pathway of best fit is critical to maintaining their interest, enrollment, and success.

The results of this study of advisors' use of technology support Steele and Carter's (2002) claim that technology helps advisors provide quality advising to students by allowing students to connect with students in multiple ways, specifically through electronic communication. They use email as a convenient method of communicating with their students, often with more than one student at a time. Student information systems allow for electronic record keeping, which the advisors believe to be most useful in establishing history and fostering consistency in service. Although noted as taken for granted by previous research (Habley, 2004), these technologies were referred to as critical in delivering service to their students. These findings also support Habley's (1993) claim that advisors use technology to address commonly experienced problems in advising: accessibility/availability of advisors and large caseloads.

Advisors' Perceptions of Using Technology

The third research question focused on the advisors' perceptions of their use of technology. These findings are discussed in the context of previous research below.

Why advisors use technology

Examining the role of technology in advising students, Leonard (2008) asserted, “There is nothing else that has had as significant an impact on advising in the past ten years as the introduction of new technologies” (p.292). The advisors in this study rely on technology because of its benefits. These benefits include easy access to information, a greater efficiency of service, and an expansion and enhancement of the advising experience. The advisors feel that technology is changing the way they advise. Supporting the findings of Heiberger and Harper (2008), the advisors focus on the benefits of using technology and what it allows them to do rather than on the specific technology itself. Technology, according to the advisors, makes some processes easier and allows others to become automated. This is similar to previous research that shows technology is relied on to increase the efficiency of advising allowing advisors to invest more time in personal interaction with students (Hunter & White, 2004; Multari, 2004).

Challenges to using technology

While the advisors rely heavily on the use of technology in their professional practices, they also experience challenges to its integration. The additional role of technical expert adds to the time it takes to provide quality service to students, a challenge experienced by the advisors. Most of the advisors referenced a “peak” period of the term during which students experience long wait times to see an advisor. It is during these times that many advisors referenced their inability to keep up with the advising needs of students. During these “peak” periods, the advisors’ goals for advising are addressing immediate concerns and moving on to the next student waiting

to be seen. Little time is left to long-term planning, exploring alternative academic plans, or demonstration of tools.

Some of the advisors expressed frustration with the gaps in students' technical competence, thus contributing to the time-consuming nature of technology. Not all students are ready to embrace high-tech tools as a vehicle for advising. The advisors described advising sessions in which students wanted things done for them despite having the tools necessary to do it themselves. According to the advisors, these students lack the computer competency needed to function within the academic community and it takes time to teach them those skills. The advisors were keenly aware of this gap in technical competency between students that rarely needed assistance with the technology and those that are easily frustrated because of their lack of experience and know-how.

The advisors also discussed the difficulty in creating buy-in at the staff and administrative levels. Some advisors stressed the importance of highlighting the benefits that integrating technology has on students in order to convince administration that such integration is positive. Although technology is changing the way advisors advise institutional policies and procedures are not always keeping up. This also pertains to administration's unrealistic expectations for advisors to see more students despite having to also teach them how to use the tools relied on by enrolled students. For these advisors, using more technology means having more work to do.

Best Practices for Using Technology

The final research question in this study explored advisors' best practices for using technology quality in academic advising. The advisors' beliefs about quality in advising influenced which practices they perceived as exemplary. Although the

advisors did not explicitly include references to technology when describing quality academic advising or sharing best practices, there were connections between quality and technology implied in their responses.

Until prompted, no advisor referenced the use of technology when sharing best practices. This evidence supports the claim that technology is viewed as of secondary, not primary, importance in quality academic advising posed by previous research (Esposito, Pasquini, Stoller, & Steele, 2011; Leonard, 2008). One advisor detailed characteristics that she believed described an exemplary advising practice overall, which included a clear mission statement, initial and ongoing advisor professional development, recognition for advisors who provide outstanding service, assessment of program effectiveness, and appropriate supportive staff and technology. Interestingly, Hunter and White (2004) also described each one of these characteristics as being critical components of an infrastructure required for quality academic advising.

Implications for Policy and Practice

Community college advisors serve a diverse student population. The majority of students enrolled at community colleges have at least one nontraditional characteristic, which often becomes a barrier to success (AACC, 2013a; Mullin, 2012). Quality academic advising has a positive effect on the success of all students—particularly those who enter higher education with disadvantages. Advisors who provide quality academic advising help students overcome such barriers by developing relationships with them, meeting their needs and expectations, developing and maintaining an accurate knowledge base, viewing advising as a form of teaching, and encouraging their independence through empowering practices. They approach advising with a service mentality understanding community college students' needs are different from

those of their university counterparts. In many cases, community college students are unaware of what their needs may be. Community college advisors face a unique set of challenges associated with advising at-risk students who are often academically underprepared and undecided.

Nearly half of all undergraduate students in the U.S. attend a community college (AACC, 2013a). As a result, any improvements in advising practices at community colleges, including those pertaining to the use of technology, affect whether or not the college completion goals set forth by institutional, state, and national leaders are reached. Although this study was situated in the community college setting, the findings of this study have implications for all academic advising contexts and professionals, including advisors, administrators, and researchers. The findings of this study on the intersection of quality and technology use in academic advising provide a basis for recommendations for action.

For Advisors

Based on the findings of this study, the following practices are recommended for advisors interested in using technology in their professional practices. As recommended by Multari (2004), these implications strike a balance between high-touch and high-tech advising practices.

Use technology-mediated communication. Technology-mediated communication provides advisors with convenient ways of staying in touch with students. Suggested technology-mediated communication tools include email, video conferencing, social media, and text messaging.

Three advisors recommended using email to communicate with students. These emails can be individualized or meant for multiple students at once. To help students, the advisors can include direct links to external resources.

As several of the advisors indicated, technology gives them the opportunity to provide a face-to-face experience to students who are unable to visit the campus from a distance. Video conferencing and collaboration technologies, such as Adobe Connect and Skype, allow advisors to personalize the advising experience and allow for document sharing.

Advisors can also integrate social media tools into their practices. Tools such as blogs, Facebook, and Twitter allow advisors to communicate with students in a format they commonly use. In a 2010 study, data collected from 36,950 students enrolled in 126 universities across the U.S. showed that of the 90% of students who use social networking sites, 97% use Facebook (Caruso & Smith, 2010). Advisors can create profiles associated with their professional roles, pages where general announcements can be made, and groups that require membership. Facebook's website provides a summary of the strengths and weaknesses of using pages and groups. Facebook allows for general announcements in the form of wall posts, private messages between profiles, and instant messaging. Many institutions have developed and implemented social media usage policies. Therefore, advisors should get permission from the appropriate personnel before implementing a social media strategy.

Communications technology, specifically text messaging, dominates students' use of information technology (Caruso & Smith, 2010). Two advisors in this study were optimistic about using text messaging to stay in touch with students. The use of text

messaging can be at an institutional or advisor level and can provide students with current, critical information in a format that they use as part of their daily routine.

Provide a well designed, robust institutional website. The institution's website should provide all of the necessary resources and information and students should be encouraged to use it. Advisors and students should be able to navigate the website effortlessly. Within the website, students should have access to an online student portal, a gateway to their personal and academic information, including admissions, registration, class schedules, and transcripts. Webforms should be available throughout the website so students can submit inquiries or requests for advising 24x7. Responses to inquiries submitted via webform can be directed back to students' portals or to their institutional email.

Use appointment-scheduling software. Appointment-scheduling software is available for purchase in desktop or web-based varieties, but specialized software can also be designed and programmed in-house to fit specific institutional needs. One advisor recommended utilizing appointment-scheduling software and electronic check-in process that tracks client volume and services rendered.

Keep abreast of technology advancements in advising. As noted by one of the advisors in this study, keeping abreast of technology advancements can be a challenge. Several resources are available to advisors who are interested in staying up to date with the use of technology in higher education and academic advising practices. Provided by the New Media Consortium and EDUCAUSE, *The Horizon Report: Higher Ed Edition* shares insight into emerging technologies and their potential impact on higher education. NACADA's Technology in Advising Commission also gives advisors

the opportunity to join a listserv that facilitates dialogue between advisors to share best practices for using technology in advising.

For Administrators

For these practices to become a part of advising departments' business practices, it is essential that administrators buy into and support the use of technology in advising. Advising practices should continue to evolve with advisors' and students' use of technology and administrators should create the environment and implement practices conducive to this evolution.

Foster exploration of technology. Administrators should work toward establishing a culture that encourages the integration and exploration of technology that improves academic advising. Some of the advisors indicated that their busy schedules kept them from having the time necessary to experiment with technologies that could enhance their practices. As part of professional development, advisors should have time dedicated to enhancing their practices. Administrators have the potential to cultivate best practices by allowing advisors this time and promoting innovation.

Dedicate time to advisor professional development. Academic advising is a dynamic interaction affected by multiple external factors, many of which are beyond the advisors' control. Such factors, including the overall organizational structure and delivery model, the campus culture, administrative leadership and support, and student population, were discussed when the advisors responded to what challenges they perceived to integrating technology into quality academic advising. Other factors stem from advisors' personal characteristics and individual experiences. Given the variety in approach to advising based on the personal characteristics and experiences of the advisors, institutions should provide professional development and training opportunities

for advisors. According to Bracken (2004), advisors perform the duties they feel are important. Therefore, advisors should be consistently trained on the priorities of their advising programs so they can understand the importance of their roles. The curriculum, pedagogy, and student learning outcomes of academic advising as prescribed by NACADA (2006) provide a framework from which to work to develop the skills of advisors.

As indicated by Koring (2005), advisors rarely receive training on the act of advising, so such opportunities may encourage a consistency of approach within advising programs and departments. Sufficient training opportunities on the available and employed technology are also recommended so that advisors are comfortable and proficient in the use of such tools. Having asserted that keeping up with advances in technology is a challenge to integrating technology, the advisors expressed a need for training opportunities. Given advisors' new responsibility of being a technical expert, this training should help them become proficient with the tools used for advising and by students.

While professional development opportunities can often present budgetary challenges to institutions, it is important that the ongoing training of advisors by the greater professional community remain a priority. When possible, internal professional development opportunities are an affordable alternative to professional conferencing.

Evaluate processes regularly. Administrators need to routinely evaluate processes to ensure they are as efficient as possible. This need is supported by several of the advisors in this study who referenced a disconnect between policy and practice. The advisors expressed being evaluated against unrealistic expectations and

suggested a reevaluation of business policies. The most noted example included administration's unrealistic expectation of what advisors were to cover with students in a 20-minute advising session.

Collaborate with advisors. Advisors enter advising sessions with specific goals in mind. It is, therefore, essential that these goals be consistent and result from collaboration between administrators and advisors. A recommendation from one of the advisors, the implementation of Advising Councils, allows for such collaboration between stakeholders and fosters communication within and between student service departments and their leadership.

Consider educational background of applicants when hiring. Given the importance of previous experiences and educational backgrounds on advisors' perceptions of quality in advising, those responsible for hiring advisors should take educational and professional background into account to ensure it is aligned with the institution's mission for and philosophy of academic advising. A more concrete educational path toward preparing future advisors for careers in academic advising that includes counseling, higher education leadership, communication, technology, and other determined critical areas of study is also recommended.

Assess students' use of technology. Administrators should assess students' use of technology before implementing practices that rely on the use of a technology to ensure that institutional use and student use are congruent. Institutions should focus research efforts on understanding their students, especially in terms of their use of technology, in order for student affairs professionals to meet their needs. Incoming

student surveys and exiting graduation surveys are opportunities for institutions to collect such information to make data-driven decisions.

Offer students skill development opportunities. Students should also have opportunities to develop their technical skills. For those students that either have little or no exposure to computers, advisors spend much of their time demonstrating the tools necessary for students to function within the academic community. Several of the advisors said their institutions do not offer computer competency courses at a basic enough level to address the needs of such novice users. Based on these frustrations, it is recommended that community colleges develop and widely offer computer competency courses for incoming students focused on the technology used within the institution, specifically the Internet and college website, the online student portal, the institutional email system, and the employed learning management system. This course could be part of a mandatory orientation or as a separate requirement to fulfill before enrolling in classes.

Recommendations for Further Research

This study explored the intersection of technology and quality in academic advising from community college advisors' perspectives. However, there is a need for additional research to gain a better understanding of the use of technology in quality advising. Recommendations include research on students' perspectives, quantitative investigations, and including university settings in the research sample.

Further research focused on similar concepts is warranted but from the students' perspectives. Such research would shed light on the similarities or differences between students' and advisors' definition of quality and on their reliance on technology.

Similar research to this study conducted on a larger scale with greater representation of the community college system would provide a greater pool of responses from which to draw conclusions. While qualitative research does not allow for generalizations of findings to other contexts, it allows participants to tell their stories using their own words. Based on the assumption that institutions assess what is important, providing such an outlet for advisors to express their ideas, suggestions, and concerns also reinforces their beliefs that they are a valued part of the academic community.

Employing quantitative approaches with larger sample sizes would allow for generalizing findings to a wider range of advising programs and settings. In addition to qualitative research approaches, a quantitative analysis of the most frequently used tools in advising would provide a platform from which to offer suggestions for the widespread use of technology in advising. Due to the variance in responses in technology tools used in this study, such survey research providing a prescribed list of technology tools available would provide frequency of use as well as a more accurate representation of what other tools are used.

Further research focused on institutional climate as it pertains to academic advising and advisors' use of technology is also needed. A greater understanding of the context in which advisors function would help institutional decision makers understand how structure, leadership, and culture translate into the services provided to students.

The findings of this study suggest that advisors are not actively seeking out new opportunities for using technology in their professional practices, but they express an

interest in doing so. An investigation aimed at understanding the barriers to such exploration would also help advising administrators create the environment and culture in which such exploration would occur.

Exploring the differences and similarities between advising practices in community colleges and universities would also provide a greater pool of findings from which to recommend action and future research. Usually offered from a specialized approach, advising at universities may have application in some community college settings as well.

Conclusion


According to Tinto (1987), academic advising is most important among institutional efforts to educate and retain students. As a result, every effort must be made to emphasize the importance of collaboration between advisors and students across college campuses. Based on their dedication to providing access to higher education for all, community colleges serve a distinctly diverse student population with ever-changing needs and goals. Advisors who operate within these dynamic institutions continually evolve to better serve students.

The purpose of this study was to explore the integration of technology into quality academic advising from community college advisors' perspectives. Due to increasing reliance on technology on the parts of institutions, advisors, and students alike, the complex roles of community college advisors are evolving requiring a reimagining of the role technology plays in quality academic advising. Viewed as both a vehicle for advising and a new addition to the curriculum of advising, technology will continue to affect the operational definition of quality academic advising and its associated business practices.

APPENDIX A
INSTITUTIONAL REVIEW BOARD APPROVAL

UF Institutional Review Board
UNIVERSITY of FLORIDA

PO Box 112250
Gainesville, FL 32611-2250
352-392-0433 (Phone)
352-392-9234 (Fax)
irb2@ufl.edu

DATE: February 8, 2013
TO: Meredith B. Coughlin
FROM: Ira S. Fischler, PhD, Chair 
University of Florida
Institutional Review Board 02
SUBJECT: Approval of Protocol #2013-U-0103
TITLE: Advisors' Perceptions of Integrating Technology into Quality Academic Advising
SPONSOR: None

I am pleased to advise you that the University of Florida Institutional Review Board has recommended approval of this protocol. Based on its review, the UFIRB determined that this research presents no more than minimal risk to participants, and based on 45 CFR 46.117(c), An IRB may waive the requirement for the investigator to obtain a signed consent form for some or all subjects if it finds either: (1) *That the only record linking the subject and the research would be the consent document and the principal risk would be potential harm resulting from a breach of confidentiality. Each subject will be asked whether the subject wants documentation linking the subject with the research, and the subject's wishes will govern;* or (2) *That the research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context.*

The IRB authorizes you to administer the informed consent process as specified in the protocol. If you wish to make any changes to this protocol, ***including the need to increase the number of participants authorized***, you must disclose your plans before you implement them so that the Board can assess their impact on your protocol. In addition, you must report to the Board any unexpected complications that affect your participants.

This approval is valid through **January 31, 2014**. If you have not completed the study by this date, please telephone our office (392-0433), and we will discuss the renewal process with you. **Additionally, should you complete the study before the expiration date, please submit the study closure report to our office.** The form can be located at http://irb.ufl.edu/irb02/Continuing_Review.html. It is important that you keep your Department Chair informed about the status of this research protocol.

ISF:dl

APPENDIX B INTERVIEW PROTOCOL

Greetings/Explicit Purpose:

I'd like to thank you for taking time to speak with me today. I'm really interested in learning more about your work as an advisor, particularly the use of technology and your perceptions of quality academic advising. I want to know how you use technology to work with students and provide quality academic advising. I'm interested in studying technology and quality academic advising from your point of view. I'd like to record our interview so I can go over it later; would that be okay?

Phenomenological Questions:

1. How are advising services organized at your institution?
2. What are your primary responsibilities as an academic advisor?
 - a. What is your student caseload?*
3. Could you describe what you would consider a typical advising session?
 - a. How, if at all, does it vary depending on whether you are meeting with the student face-to-face, talking over the phone, or communicating through email?
4. How would you describe quality academic advising?
 - a. What are its critical components?
 - i. Why do you think these components are important for quality?
5. What do you think is the goal of advising?*
6. How, if at all, have your personal experiences with advising as a previous student influenced your professional practice?*
7. Could you please describe what you would consider an exemplary advising practice?
 - a. Why does this practice stand out as exemplary to you?
8. How, if at all, do you see technology fitting in?
9. What types of technology do you use and how do you use them?
 - a. Why do you use these tools in particular?
 - b. Are there any conflicts with institutional policy?
 - c. Are there any limitations imposed on its use?
 - d. If so, how do these limitations interfere with what you are trying to do?
10. In what ways, if any, is technology changing the way you provide quality academic advising?
 - a. Can you give me an example?
11. In your opinion, what are some benefits to integrating technology?
12. According to you, what are some challenges to integrating technology?
13. Is there anything else that you would like to add that we haven't already addressed?

* Added to the protocol after completing the first interview

APPENDIX C
INFORMED CONSENT

INFORMED CONSENT

Protocol Title: Advisors' Perceptions of Integrating Technology
Into Quality Academic Advising

**Please read this consent document carefully before
you decide to participate in this study.**

Purpose of the Research Study: The purpose of this study is to discover how advisors are using technology for quality academic advising in order to share best practices.

What you will be asked to do in the study: You will be asked to participate in an in-depth, one-on-one interview where you will be asked about your use of technology in academic advising.

Time Required: The interview should take no more than 1 hour to complete.

Risks and Benefits: There are no risks associated with this study. You will not benefit directly by participating in this study.

Compensation: There is no monetary or other compensation available for participation in this study.

Confidentiality: Your identity will be kept confidential to the extent provided by law. No personally identifiable information will be shared. In addition, no sensitive information will be recorded during the interview that could damage your reputation, employability, or place you at risk for criminal or civil liability. All data from the interviews will be maintained in a password-protected database. At the conclusion of the study, all interview transcripts will be destroyed.

Voluntary Participation: Your participation in this study is completely voluntary. There is no penalty for not participating. The study has no physical or psychological risk to participants. Your participation or non-participation will be completely free of identifiers and will therefore have no effect on your employment status.

Right to withdraw from the study: You have the right to discontinue participation in this study with no penalty at any time without consequence.

Whom to contact if you have questions about the study:

Meredith Coughlin, Doctoral Candidate
Dr. Swapna Kumar, Supervisor

Whom to contact for information regarding your right as a research participant:
UR IRB at (352) 392-0433

Approved by
University of Florida
Institutional Review Board 02
Protocol # 2013-U-0103
For Use Through 1-31-2014

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