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Advising Assessment Practices of Advising Professionals at an Accredited United Kingdom Urban Career-Focused Higher Education Institution: A Replicated Quantitative, Descriptive Analysis

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ABSTRACT

ADVISING ASSESSMENT PRACTICES OF ADVISING
PROFESSIONALS AT AN ACCREDITED UNITED
KINGDOM URBAN CAREER-FOCUSED HIGHER
EDUCATION INSTITUTION: A REPLICATED
QUANTITATIVE, DESCRIPTIVE ANALYSIS

by

Catherine E. Mahrt-Washington

Chair: Gustavo Gregorutti

ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

Andrews University

School of Education

Title: ADVISING ASSESSMENT PRACTICES OF ADVISING
PROFESSIONALS AT AN ACCREDITED UNITED KINGDOM URBAN
CAREER-FOCUSED HIGHER EDUCATION INSTITUTION: A
REPLICATED QUANTITATIVE, DESCRIPTIVE ANALYSIS

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Date completed:

The Problem

As the world has flattened, the globalization and quality education movement
surrounding higher education worldwide has led to the accountability of all stakeholders
regarding student success in and beyond the classroom. Student mobility continues to
impact tertiary enrollments as families and students consider the proliferated traditional
and non-traditional enrollment alternatives along with prospective lower tertiary debt
options. Although assessment, an accountability tool, in co-curricular areas such as

advising has been overlooked by leaders, advising is not impervious to accountability consequences. The problem is that assessment of advising, if performed, is oftentimes implemented informally, without a well-defined framework or the utilization of sophisticated measures, consequently advancing uninformed decisions that may have adverse effects on student success.

This study examined the advising assessment practices (identify SLOs, determine assessment method(s) used, and utilize assessment data) of an accredited urban career-focused university with a student body comprised of over 30% non-natives representing 65 countries and located in the United Kingdom; a country identified as the second most popular tertiary mobile student enrollment destination, in a time when tertiary student success is under intense scrutiny.

Method

An online, validated, cross-sectional National Survey on Assessment of Academic Advising instrument was slightly revised and used for this replicated study to gain a fundamental cross-cultural understanding of advising assessment practices from the viewpoint of advising professionals having responsibilities associated with undergraduate advising at one U.K. university. Three of the four research questions focused on advising assessment practices and included: 1. What are the advising student learning outcomes identified at the participating U.K. university? 2. What are the advising methods utilized to conduct assessment of advising SLOs at the participating U.K. university? and 3. How are the advising assessment data used for advising co-curricular improvement(s) at the participating U.K. university? The fourth question focused on the advising

professional's assessment perceptions and included: 4. What elements are viewed as supporting the assessment of advising at the participating U.K. university?

All response data were analyzed using descriptive statistics. The nominally measured independent variables included the three recognized assessment practices of: 1) identifying advising SLOs, 2) employing assessment method(s), and 3) utilizing advising assessment data. The 26 pre-defined advising student learning outcomes that articulate "what students are expected to know (cognitive learning), do (behavioral learning), and value (affective learning)" were the nominally measured dependent variables (Powers, 2012, p. 15).

Findings

The findings indicated that the European university informally assessed advising through the three observed advising assessment practices. The sample reporting described cognitive learning outcomes as the most identified advising learning outcomes; focused on "what students should know as a result of advising" (Powers, 2012, p. 40). The data also revealed that surveys/questionnaires were the advising assessment method identified with the highest frequency within all the advising student learning outcomes, and the main use for advising assessment data for both cognitive and behavioral advising student learning outcomes was to improve advising process/delivery, whereas the primary assessment data use for affective student learning outcomes was to improve advising curriculum.

Furthermore, the results suggested the four main elements perceived as important in supporting advising assessment were: advisors needed to believe that advising

assessment was a worthwhile endeavor, advisors need to know how to conduct assessment of advising, advisors need to feel confident in their abilities to properly conduct assessment of advising, and that advisors need more information about what similar universities are doing to assess advising. Whereas, respondents indicated the most neutral view of the element: advisors need to be rewarded for assessment of advising activities, and interestingly, revealed that advisors need to enjoy the assessment of advising process as unimportant in supporting the assessment of advising (Powers, 2012).

Conclusions

The research data suggests that the university informally exercised the steps identified as best practices in measuring the effect of advising on student learning. Moreover, with approximately 85% of respondents indicating the 7 cognitive, 11 behavioral and 8 affective learning outcomes were informally assessed implying an opportunity to formalize a culture of advising assessment. Additionally, the data suggests the leading perceptions of advisors needing to believe that advising assessment was a worthwhile endeavor, advisors needing to know how to conduct assessment of advising, advisors needing to feel confident in their abilities to properly conduct assessment of advising, and advisors needing more information about what similar universities are doing to assess advising as important factors in supporting advising assessment (Powers, 2012). This would involve a need for an internal strengths, weaknesses, opportunities and threats (SWOT) analysis of administration's current support for advising assessment practices (Hladchenko, 2014).

Furthermore, as the first study to examine the advising assessment practices of one European university, this study begins to addresses the current gap in published research regarding co-curricular assessment practices that creates a hindrance in replicating applicable cross-cultural advising assessment practices by "seeking to establish commonalities between cultures yet also seeking to identify areas of difference" within the global higher education community in support of student success (Newell, 1998, p. 359).

Andrews University

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A Dissertation

Presented in Partial Fulfillment

of the Requirements for the Degree

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DEDICATION

To my husband Patrick, our daughters Courtney and Taylor. To my late mother,

Mary Ellen Hawken Mahrt and late brother, Steven Mahrt.

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LIST OF ABBREVIATIONS

HEIs	Higher Education Institution(s)
SLO	Student Learning Outcome
NILOA	National Institute for Learning Outcomes Assessment
OECD	Organisation for Economic Co-operation and Development
SPSS	Statistical Package for the Social Sciences
EBP	Evidence-Based Practices
UCAS	Universities and Colleges Admissions Service
IIE	Institute of International Education
KPI	Key Performance Indicator(s)
CAS	Council for the Advancement of Standards in Higher Education
SMART	Strategic and Specific, Measurable, Attainable, Results-based and Time-bound
PAIB	Professional Accountants in Business
IFAC	International Federation of Accountants
PLA	Prior Learning Assessment
EHEA	European Higher Education Area
EU	European Union
IPPR	Institute for Public Policy Research
SIS	Student Information Systems
NACADA	National Academic Advising Association
JCSEE	Joint Committee on Standards for Educational Evaluation

QAA	Quality Assurance Agency for Higher Education
EQAA	European Quality Assurance Agency
ENQA	European Association for Quality Assurance in Higher Education
CHEA	Council for Higher Education Accreditation
FoE	Foundations of Excellence
ISB	International Student Barometer
RNL	Ruffalo Noel Levitz
NSSE	National Survey of Student Engagement
EQA	External Quality Assurance
ECTS	European Credit Transfer and Accumulation System
OfS	United Kingdom for Office for Students
DoE	United States Department of Education
OPE	Office of Postsecondary Education
UKES	United Kingdom Engagement Survey
CAS	The Council for the Advancement of Standards in Higher Education
Ofsted	United Kingdom's Office for Standards in Education
CQI	Continuous Quality Improvement
TQM	Total Quality Management
VET	Vocational Education and Training
META	Measurement, Empowerment, Teamwork, and Advisee
EFQM	European Foundation for Quality Management
TEA	Technology-Enhanced Assessment
MOOCs	Massive Open Online Courses

URL   Uniform Resource Locator of Web page

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"An intelligent heart acquires knowledge, and the ear of the wise seeks knowledge."
(Prov 18:15 ESV)

CHAPTER 1

INTRODUCTION

A commitment by many higher education institutions (HEIs) across the globe to establish inclusive, high-quality, learning-centered and knowledge sharing environments that cultivate student success in and beyond tertiary education is one factor influencing higher education reform through the scrutiny of learning evidence. Moreover, student mobility along with the quality education and career assurance movement surrounding higher education in the United States and Europe has led to the accountability of all stakeholders (Carey & Schneider, 2010; Hoecht, 2006; Huisman & Currie, 2004). As the world flattens, this global commitment to inclusivity and student success, entangled in such scrutiny, requires evidence sustained through learning outcomes assessment.

A focus on the quality of academic and career preparation in higher education transformation is not new, and as Morley (2003) maintained, this focus on quality is "an international phenomenon" (p. 18). A transformation phenomenon, in spite of current U.S. travel and European Union challenges, emphasizing the globalization of higher education and career preparation due to the demands of a more fluid and interconnected world (Baskerville, 2013; Fischer, 2017; Sternberger, Thorndike Pysarchik, Yun, & Deardorff, 2009). The historical difference with respect to student success and learning evidence assessment is in providing proof of student learning beyond the classroom. Traditionally, student-learning outcomes (SLOs) have been associated with, and assessed in regards to, classroom curriculum development and instruction (Esposito, 2009; Walters, 2016). Moreover, accountability in administrative (non-academic student

affairs) areas, such as advising, has largely been overlooked and leaders have been slow "to engage in assessment" (Kniola, 2013, p. 90; Shay, 2008).

A holistic approach incorporating in and out-of-classroom learning, supported by well-known student development theories, has influenced student success programming in recent decades—theories such as Chickering's Identity Development, Baxter-Magolda's Self-Authorship, Schlossberg's Transition Theory, Holland's Theory of Career Choice, Gottfredson's Theory of Circumscription and Compromise, and Kolb's Theory of Experiential Learning. Seminal research of student college experiences by Wilson in the late 1960s, asserting student learning also occurs outside the classroom, shifted the focus on student success to a holistic curricular and co-curricular imperative (Kerr, Tweedy, Edwards, & Kimmel, 2017 ; Kuh, 1993; Kuh, 1995; McKinney, Medvedeva, Vacca, & Malak, 2004; Ruben, 2001; Steffes, 2004). One such distinctive postsecondary co-curricular, out-of-classroom learning experience is advising. Wherever student development and learning are presumed to occur, advising student learning outcomes in support of student success in and beyond tertiary education need to be well defined, measurable, substantiated and utilized to improve all advisee's ability to succeed in and outside the classroom (Maki, 2010; Suskie, 2009; Young-Jones, Burt, Dixon, & Hawthorne, 2013).

Whether the "where" higher education students are developing and learning is abroad or in the United States, in light of a more mobile student body, understanding advising practices that support student success in and beyond tertiary education from a global advising perspective is beneficial for many higher education stakeholders. To underestimate the relevance of increased and ongoing globalization influences on

advising through pathways such as curriculum design, research, internship and apprenticeship affiliations, and study and work abroad prospects would place those institutions of higher education at a disadvantage (Feller & O'Bruba, 2009). The Institute of International Education (IIE) student mobility study found, with increased targeted marketing, that American undergraduate and graduate students choosing to pursue tertiary degrees abroad from 2010 to 2012 increased 5%, potentially offering students and their families tertiary options at substantial cost savings (Belyavina, Li, & Bhandari, 2013, p. 2; Bollag, 2007; Labi, 2007). Likewise, the historic Bologna Process was established in the late 1900s to create a more uniform European system allowing students easier mobility among European HEIs. European ministers established a 2020 goal whereby 20% of graduates from European HEIs are expected to have engaged in an academic or career experience abroad. This goal was based on the belief that the "mobility of students … enhances the quality of programs and excellence in research; it strengthens the academic and cultural internationalization of European higher education" (European Commission, 2009, para. 19). Furthermore, projected worldwide economic changes and global higher education population increases presents an opportunity for the leading higher education international destination, the United States, to "enroll significantly more international students" (Organisation for Economic Co-operation and Development, 2014; Ortiz, Chang, & Fang, 2015; Ruby, 2013).

The evolution of advising within HEIs has led to the consistent endorsement by many experts that advising is a "form of teaching" (Appleby, 2008; Christie, 2016; Crookston, 1972; Drake, 2015; Hughey, Nelson, & Damminger, 2009, p. 10; Kelley, 2008; Lowenstein, 2005; McCash, 2006; McChesney, 1995; Woodbury, 1999, p. 10).

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Establishing advising as teaching emphasizes accountability for both the adviser and the advisee. Incorporating measurable instructional student learning outcomes (SLOs) into advising practices addresses the accountability expectation by changing the focus of the adviser/advisee relationship from merely an informational relationship to a holistic developmental partnership (Banta, Hansen, Black, & Jackson, 2002; Campbell & Nutt, 2008; Damminger, 2009; Funk & Bradley, 1994; Shek & Yu, 2016). An advising partnership frequently fosters learning by assisting and instructing students along a trajectory of dependency to autonomy (Baxter Magolda, 2009; Frederick, Sasso, & Barratt, 2015; Reynolds, 2010).

Assessable SLOs designed for advising accountability begin with the identification of advising SLOs, outlined by Robbins and Zarges (2011) as having a focus on what students "know (cognitive learning), do (behavioral learning) and value (affective learning)" (para. 9; Schiersmann et al., 2016; Sternberger et al., 2009). Identification of SLOs is the first of three fundamental steps posited by Powers (2012) as "best practices with respect to measuring the effect of … advising on student learning" (p. v). The remaining two steps are to devise "how assessment is conducted" and to ascertain "how assessment results are used" (Powers, 2012, p. v).

In the arena of higher education it is commonly acknowledged that the years of constricted resources, increased student mobility, competition for student enrollments and the need for workforce "upskilling" impacting economic advancement are all factors affecting the current and future state of affairs in the United States and abroad (Ahmad, Farley, & Naidoo, 2012; Altbach, 2011; Baskerville, 2013; Centre for Educational Research Innovation (CERI), 2001; Desjardins, 2015; Orphanides, 2012). In times of

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intense competition for student enrollments, limited resources and heightened accountability, researching advising assessment best practices assists stakeholders with any concerns that may surround potential institutional and program improvement(s) by providing an iterative road map for the planning, implementation, evaluation and improvement of advising assessment practices. The research can proactively inform involved parents whose child may be considering international tertiary enrollment in better understanding global advising expectations and practices, if their child chooses to enroll in a university that is a long distance from home (Kennedy, 2009). Moreover, achieving an understanding of advising assessment practices from a cross-cultural perspective is valuable for stakeholders to discern the effect advising has on both native and non-native students' learning and provides a blueprint for advising accountability. Furthermore, researching advising best practices provides opportunities for the global advising community to collaborate and share information based on amassed research data, thereby achieving a more comprehensive and global perspective of advising assessment practices supporting a more mobile diverse student body.

While investigating student success, the founding director at the National Institute for Learning Outcomes Assessment (NILOA), Kuh (1997), asserted that "It is hard to imagine any … support function that is more important to student success and institutional productivity than advising" within tertiary cultures (as cited in Kot, 2014; p. 11).

Problem Statement

The latest Institute of International Education (IIE) (2017) reporting of student mobility revealed that British universities continue to see an increase in U.S. undergraduate applicants "over 20 percent of their total higher education populations" (p. 5), over the last five years with a record high in 2015-2016 with non-native enrollments (National Center for Education Statistics, 2015). Additionally, the same Institute of International Education (2017) report highlighted that tertiary enrollments of international students in the U.S. stagnated in 2016, however recent enrollments indicate more than a million international students for two consecutive years "reaching a record high of 1.08 million" (para. 2). As the world flattens these enrollment shifts require a more complete global understanding of the tertiary culture of advising practices impacting students through evidential assessment. Advising, the process of assisting tertiary students in clarifying their educational and career goals and developing plans centered on those goals, is one piece of a very complicated student success puzzle requiring an understanding of the needs of a more globally diverse and fluid student body (Marginson, 2006; Winston Jr., Enders, & Miller, 1982).

The problem is that assessment of advising, as Powers (2012) found, "is often minimal, narrow, and inconsistent" (p. 2). Assessment in higher education is commonly done, as Klahn (1990) discovered, with "relatively unsophisticated measures" (p. 3). Furthermore, the absence of data, such as advising assessment practices, as acknowledged by Upcraft and Schuh (2002), advances second-rate decisions based on "intuition, prejudice, preconceived notions, or personal proclivities—none of them

desirable bases for making decisions" (p. 20). Continuing in this fashion would not be a recommended strategy for higher education stakeholders.

This research addressed if these threats existed at one university in the United Kingdom by concentrating on whether undergraduate advising student learning outcomes were identified, whether any assessment method(s) were used in conducting assessment and whether assessment data were utilized for advising co-curricular improvements. Additionally, this research addressed any cross-cultural concept differences and sameness with the advising assessment findings presented in the initial 2012 U.S. study (Hubbard, 2015; Lindsay & Ehrenberg, 1993)

Purpose of Study

The purpose of this replicated study was to perform the first study of tertiary advising assessment practices outside of the U.S. by examining the advising practices (identify SLOs, assessment method(s) applied, and utilize assessment data) of one accredited urban career-focused U.K. university with a student body comprised of over 30% non-natives representing 65 countries (Higher Education Statistics Agency, 2018). Findings from this study do not pertain to advising professionals employed at other European career-focused institutions of higher education.

Research Questions

The questions in this study sought to gain a rudimentary cross-cultural perspective of advising assessment practices by examining the following:

1. What are the advising student learning outcomes identified at the participating U.K. university?

2. What are the advising methods utilized to conduct assessment of advising SLOs at the participating U.K. university?

3. How are the advising assessment data used for advising co-curricular improvement(s) at the participating U.K. university?

4. What elements are viewed as supporting the assessment of advising at the participating U.K. university?

Rationale

The original study performed by Powers (2012) focused on tertiary advising assessment practices in the United States, classified as the leading destination for internationally mobile students. However, with the United Kingdom identified as the second most popular tertiary destination, a seminal study regarding advising assessment practices in the U.K. is important (Organisation for Economic Co-operation and Development, 2018). Furthermore, with the commitment by many higher education institutions (HEIs) across the globe to student success beyond tertiary education, examining career advising assessment practices from a European perspective is correspondingly important to investigate.

A 2014 Organisation for Economic Co-operation and Development (OECD) report found the United Kingdom to be one of six countries that have more non-natives than natives enrolled in their higher educational institutions (Organisation for Economic Co-operation and Development, 2014). The U.K.'s higher education institutions' (HEI's)

tradition of independence and autonomy from the government, according to Baskerville (2013), is believed to be a contributing factor of student determinations and international success in "research, scholarship and education" (p. 11). Educated students who gain employment skills outside their home country oftentimes stay, a phenomenon commonly referred to as brain drain (Curaj, Scott, Vlasceanu, & Wilson, 2012). The foreign-born rate of employment, highlighting the percentage of those born outside of the employment location to persons employed in relation to the total foreign-born population, increased for the United Kingdom from a rate of 63.7% in 2005 to a rate of 72.5% in 2017; in the United States the foreign-born employment rate increased from 13.3% in 2000 to 17.1% in 2017 (Bureau of Labor Statistics (BLS), 2018; Organisation for Economic Co-operation and Development, 2017b). Maintaining focus and knowledge on the ever-changing and complex landscape of higher education and changing national and international economies is important for both institute and economic perseverance, and therefore student success.

The initial advising assessment study was performed by Powers (2012) with a population of U.S. professionals responsible for academic advising assessment to ascertain whether advising learning outcomes had been identified and assessed, and whether the data were utilized for advising learning outcome improvements at their institutions of higher education. The results from the Powers (2012) U.S. study disclosed that a majority of respondents had, in fact," identified academic advising student learning outcomes"; the participants that had "identified academic advising student learning outcomes, just over half had assessed the outcomes, and more than half reported utilizing the data for improving student learning outcomes and advising processes" (p. v),

revealing the lack of any formal implementation of advising, co-curricular assessment practices.

General Methodology

The quantitative research methodology used in this study described the advising assessment practices at the participating U.K. university. Describing research problems, as theorized by Creswell (2012), is a "major characteristic" (p. 13), of quantitative research. Quantitative research, as posited by Newman and Benz (2006), is utilized to describe an occurrence(s) and "begins with a theory (or hypothesis) and tests for confirmation or disconfirmation of that hypothesis" (p. 3), to guide the community in the subject matter. Quantitative research methods, according to Creswell (2012), will "always affect the outcome of a study" (p. 296), while Balnaves and Caputi (2001) assert, they are "subject to bias and error" (p. 103), requiring the researchers attention.

An existing questionnaire adapted for advising professionals at an accredited urban career-focused HEI in the United Kingdom who perform or are accountable for either academic (programme) or career (industrial placement) advising practices was utilized. Descriptive statistical analysis was executed, as suggested by Creswell (2012), to "interpret the results of this analysis in light of … prior studies" (p. 15), with this study's procured data.

Qualtrics, an online survey platform, was the survey tool utilized to accrue participant responses. The responses of 52 advisers at the HEI in the United Kingdom were investigated using the software Statistical Package for the Social Sciences (SPSS).

Conceptual Framework

A culture of evidence model, a reputable model that has traditionally guided instructional curriculum development and assessment, is the conceptual framework for this study (Figure 1). An advising culture of evidence would support, in part, the global commitment to inclusive, high-quality, learning-centered and knowledge sharing environments impacting the success of a mobile student body in and beyond tertiary education. An established advising culture of evidence can only thrive and persist with ongoing support and analysis by engaged institutional stakeholders. Banta's (n.d.) esteemed culture of evidence model, as Maki (2010) highlights, includes: "planning and budget (assessable outcomes), implementation (instrumentations), evaluation (data collection and analysis) and improvement (application of findings)" (p. 292), exemplifying a unified model.

Planning & Budgeting

1. Mission, Vision, Goals developed
2. Unit goals aligned
3. Programs based on assessable goals, with performance indicators
4. Annual reports on web

Assessable Outcomes

Improvement

1. Reporting to internal constituents
2. Demonstrating accountability to external stakeholders
3. Proposing improvement initiatives based on assessment findings
4. Improving assessment methods
   - Web-based data
   - Electronic portfolios

Application of Findings

Culture Of Evidence

Instrumentation

Implementation

(Everyone on campus implements goals)

Tracking Data Collection Analysis

Evaluation

1. Assessment of prior learning
2. Assessment of learning outcomes
   - in major
   - in general education (based on PULs)
3. Constituent surveys
4. Academic and administrative program reviews
5. Campus performance indicators
6. Management information and analysis
7. Program cost analysis
8. Web-based evaluation tools
9. Course evaluations
10. Program evaluation/action research
11. Institutional accreditation

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Figure 1. Culture of evidence. From "Assessing for learning: Building a sustainable commitment across the institution" (p. 292), by P. Maki, 2010, Virginia: Stylus Publishing.

National and international higher education advising programs would be strengthened by this established culture of evidence framework utilized historically in the application of instructional curriculum assessment. Creating an advising culture of evidence by aligning advising assessment practices with this evidence framework (plan: identify SLOs, implement and evaluate: methods to conduct assessment, and improvement: data use) would provide all higher education stakeholders verification of the effect of advising on student learning of all, native and non-native, students.

Challenges that complicate the establishment of an advising culture of evidence include finite resources (both human and financial), adviser/advisee role complexity, increased professional demands and expectations, and as McGann Culp (2012) postulated, the growth in effectiveness tools that calculate "processes, programs and services" (p. 1), and institutional division causing silos that continue to exist between some academic and student affairs units (Coughlin, 2013; Muehleck, 2012; Organisation for Economic Co-operation and Development, 2004). Cultivating a culture of evidence, as posited by Baker and Sax (2012), "calls for improving student success for all students by employing empirically based research and analysis to inform decision making" (p. 48), for those responsible for such decisions. While exploring evidence-based practices (EBP), Moss (2007) found, EBP to be "predominant" and consist of "decisions about practice and policy … made on the basis of empirical evidence about outcomes" (as cited in Beare, Marshall, Torgerson, Tracz, & Chiero, 2012, p. 160), incorporating the importance of policy with evidential practices. An advising culture of evidence within an instructing and learning organization, according to McCormick, Kinzie, and Korkmaz

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(2011), involves a "commitment to systematic use of evidence in problem identification and solution" (p. 5), within HEIs globally (Dill, 1999).

Significance

A review of assessment literature illustrates the deficiency of research dedicated to advising assessment practices among HEIs in the U.S. and abroad (Gordon & Habley, 2000). A replication of Powers (2012) U.S. tertiary research at the participating university in the U.K. is warranted for two reasons: 1) existence of this deficiency in research and 2) the ranking of the United Kingdom as the second most popular tertiary destination for internationally mobile students. Replication research incorporates, as Wainer (2011) asserted, "different researchers in different places, with incidental or deliberate changes to the experiment. Such … replication reduces the influence of sampling variability and … tests the generality of results" (p. 44), while examining theories. Furthermore, validating the need for replicated research, McCullough and Vinod (2003) theorized, that "replication is the cornerstone of science. Research that cannot be replicated is not science and cannot be trusted either as part of the profession's accumulated body of knowledge or as a basis for policy" (p. 888), or implementation.

Why is researching best national and international practices important to any higher education organization? Once researched and understood, certain advising best practices and findings can bolster continuous improvement and likely contribute to student success of students, along with institutional reputation and survival (Association of Colleges, 2018; Commission on Institutions of Higher Education (CIHE), 2018). Furthermore, a continued gap in published research about advising assessment practices

creates a hindrance in replicating successful advising assessment practices within the national and international higher education community in support of student success. The results of this study will add a fundamental cross-cultural perspective to advising assessment literature by focusing on the advising culture of an accredited urban career-focused institution in the United Kingdom. The findings of this study will promote an understanding, sharing, and advancement of the effect of advising on student learning, inclusive of a more mobile student body, evidenced through assessment practices. Goal number two of the 2012-2016 Department of Education's International Strategy plan focused specifically on knowledge acquisition of top achieving countries' practices, and according to U.S. Department of Education (2012), disseminating that knowledge for the advancement of a "world-class education for all" (p. 8), through thoughtfully shared and developed practices and policies that HEIs deem suitable.

A culture of evidence for advising student learning, including assessment and all its challenges and benefits, deserves the attention of change leaders like higher education administrators, policy makers, and advising practitioners all over the globe. Informed decisions surrounding advising programming and resources impacting student success in and beyond their tertiary education cannot occur without a supported and established evidential advising culture. A culture, as Maki (2010) provisions, is derived from thoughtful "planning (assessable outcomes), implementation (instrumentation), evaluation (data collection and analysis), and improvement (application of findings)" (p. 292), of advising practices; especially as HEIs face more challenging times of student enrollment competition and degree completion, increased student mobility, funding

limitations, accountability and concerns regarding future workforce skillsets and placements.

<div align="center">Assumptions</div>

An assumption, as posited by Vogt and Johnson (2011), is "a statement that is presumed to be true, often only temporarily or for a specific purpose, such as building a theory" (p. 16), guiding the researcher and community of the research focus. Although there are differences within the academic and labor environments between the U.S. and the U.K., similarities such as courses being taught in English, utilizing, as Bollag (2007) found, "academic-credit systems" (p. 1), career emphasis and educational quality that, according to O'Mahony and Stevens (2009) has, "caught up with the U.S." (p. 191), while achieving worldwide recognition makes comparing advising assessment practices more straightforward (U.C.A.S., 2018). The primary assumptions of this study are:

1. Advising assessment practices (identification of SLOs, assessment method(s), and utilization of assessment data) in the United States are similar to the advising assessment practices exercised at the participating U.K. higher education institution.

2. Creating a tertiary advising assessment culture of evidence would assist all stakeholders in understanding the effect of advising on student learning whether the student studies in the U.S or abroad.

3. The respondents replied truthfully to the survey questions.

Limitations

Limitations, according to Habib and Maryam (2014) have been, "deliberately imposed" (p. 52), on the research design. The limitations fundamental to this study include:

1. The study participants represent a group of advising professionals from one U.K. university. It was not the objective to generalize the results to other populations.

2. The study focused on the assessment of advising practices in higher education only.

3. I was a master's program classmate with an administrator at the participating U.K. university.

4. The validated, cross-sectional survey is lengthy at over ninety questions, perhaps prone to response rate errors resulting from feedback fatigue (Connelly, 2011; Suskie, 2009; Wise & Barham, 2012).

Delimitations

Delimitations, as Daniel and Harland (2018) found, are research "boundaries" established by the researcher "that make clear what has been included" (p. 129), and as Farmer (2015) understood, they "guide the researcher in coming to an effective and thorough conclusion" (p. 24), of any study. Delimitations of this research include:

1. All of the European participants, a convenience sample, were selected based on their defined advising roles at a U.K. university.

2. The curriculum assessment best practices (identification and assessment of SLOs, assessment methods, use of multiple assessment measures and utilization of assessment data) were customized for advising assessment practices.

3. The use of a pre-existing, validated, cross-sectional online survey instrument.

Definition of Terms

Some confusion when comparing and researching higher education initiatives, like advising assessment practices, lies within the use of terminology. This confusion, according to Birtwistle, Brown, and Wagenaar (2016), is due in large part to the lexicon being "culturally and historically bound" (p. 14), through research question development and response data. However, terminology is more successful, as Brooks and Jean-Marie (2015) asserted, when employing "communication standards and cultural sensitivity" (p. 877), throughout the research process. Furthermore, comparative research provides a viewpoint that, as Altbach (1973) found, "can add substantially to the discussion of higher education in the United States and to point to some of the most relevant issues dealt with in other countries" (p. 1), especially focused on student success.

Advising, for the purpose of this paper, is inclusive of academic (programme) and career (industrial placement) advisement.

Academic Advising, at the programme level, "is a developmental process that assists students in the clarification of their life/career goals and in the development of 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 adviser; it is ongoing, multifaceted, and the responsibility of both student and adviser" (Winston Jr. et al., 1982, p. 17).

Career Counseling/Guidance, for industrial placement, "is a deeper intervention in which an individual's skills, attributes and interests are explored in relation to their career options" (House of Commons, 2013, p. 8).

Cross-cultural, for the purpose of this paper, is comparing commonalities and differences between cultures *(Newell, 1998).*

Assessment "is an on-going process" that institutes "clear, measurable expected outcomes of student learning." The process includes establishing opportunities for students to achieve stated outcomes, collecting and analyzing measured outcomes to determine achievement of anticipated learning outcomes, and utilizing measured data for student learning improvements (Suskie, 2009, p. 4).

Evaluation "uses information based on the credible evidence generated through assessment to make judgments of relative value: the acceptability of the conditions described through assessment" (Gardiner, 2011, p. 1).

Formative assessment "refers to frequent, interactive assessments of student progress and understanding to identify learning needs and adjust teaching appropriately" (Organisation for Economic Co-operation and Development, 2008, p. 1).

Globalization refers to the worldwide "flow of technology, knowledge, people, values [and] ideas ... across borders" (Knight, 2004, p. 8).

Internationalization is "the work of particular individuals in particular settings, who establish research projects and programs, create particular mobility pathways, and design particular globally oriented pedagogies" (Friedman & Miller-Idriss, 2015, p. 98).

Learning is "a comprehensive, holistic, transformative activity that integrates academic learning and student development" (Keeling & Dungy, 2004, p. 18).

Mobile Student is "an individual who has physically crossed an international border between two countries with the objective to participate in education activities in a destination country, where the destination country is different from his or her country of origin" (United Nations Educational Scientific and Cultural Organisation, 2019).

*Outcome*s are statements that "clearly state the expected knowledge, skills, attitudes, competencies, and habits of mind that students are expected to acquire at an institution of higher education" (National Institute for Learning Outcomes Assessment, 2012, para. 1).

Perception is "the process by which we derive meaning through experience" (Barry, 2005, p. 48).

Student Success is "engagement in educationally purposeful activities, satisfaction, acquisition of desired knowledge, skills and competencies, persistence, attainment of educational objectives, and post college performance" (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006, p. 7).

Summative assessment is "used to measure what students have learnt at the end of a unit (Organisation for Economic Co-operation and Development, 2008, p. 1).

Summary

This research focused on the advising assessment practices of a group of advising professionals who have some level of responsibility for academic (programme) and career (industrial placement) advising at an accredited urban career-focused HEI in the United Kingdom. The goal was to learn whether the European higher education institution had identified advising student learning outcomes and determined

methods used to conduct assessment, and how the assessment data were used for advising co-curricular program improvement(s). This international focus of advising assessment is important due to factors impacting the quality expectation across the globe regarding student success in and beyond tertiary education substantiated through an assessment culture of evidence (Banks & Blackstock, 2017; Organisation for Economic Co-operation and Development, 2005). The addition of this comparative study, along with Powers' 2012 U.S. study, strengthens the assessment literature and the advising community across the globe with preliminary data illustrating, as Powers (2012) found, "the effect of … advising on student learning" (Powers, 2012, p. v), at the participating U.K. institution.

Organization of the Study

This study is comprised of five chapters. Chapter 1 outlined the foundational components of the study: the problem statement, purpose, research questions, rationale, conceptual framework, significance, limitations and delimitations, term definitions, general methodology, and a succinct summary. Chapter 2 will review literature relevant to the categories of Banta's (n.d.) culture of evidence model: "planning (identified assessable outcomes), implementation (instrumentation), evaluation (data collection and analysis), and improvement (application of findings)" framing advising assessment practices (Maki, 2010, p. 292). Chapter 3 is devoted to research methodology details such as: design, population description, identification of variables, instrumentation and reliability, data collection, statistical analysis, and a concise summary. Chapter 4 provides a comprehensive analysis and summary of the obtained data. Finally, chapter 5 features concluding thoughts, author recommendations, and indications of future research.

CHAPTER 2

LITERATURE REVIEW

This chapter includes a review of literature underscoring the culture of evidence components inclusive of: planning, implementation, evaluation and improvement; as they pertain to advising assessment practices (Maki, 2010).

Introduction

Expectations across the globe of student success in and beyond their tertiary education have become driving forces demanding change on many levels within higher education. Student success, an incredibly complex variable of a dynamically diverse and mobile student body, is often equated with and used synonymously with retention, graduation and employment placement rates (Hunter, Tobolowsky, & Gardner, 2009; Kuh et al., 2006; Yorke & Longden, 2004). Literature abounds with the importance and positive correlations of education and career achievement with increased lifetime earnings and advanced economic impacts (International Labour Office, 2010; Tamborini, Kim, & Sakamoto, 2015; Willetts, 2014). The most recent U.S. Census Bureau's educational attainment report found that individuals, with an earned bachelor's degree, earned 1.5 times higher salaries than individuals with an earned high school degree, and those with an advanced degree earned 2.5 times more annually than those with a high school degree (U.S. Census Bureau, 2017). The PricewaterhouseCoopers (2007) U.K. economic report also notes higher lifetime earnings for those obtaining tertiary degrees; however, the report goes further by conveying that postsecondary degree earning individuals are "more likely to be employed" and "more likely to return to employment

following periods in unemployment or economic inactivity" (p. 2), corroborating the importance of further and higher education.

A more recent phenomenon of increased university-industry collaborations that developed due to scarce financial resources also has inherent benefits of student success through an ability to apply what students have learned and increase their potential employment network through local and global research experiences, internships or apprenticeships (Vest, 2007). In the United States these partnerships have led to the establishment of on-campus incubators allowing many students real-time learning and experiences in solving current and future industry challenges. In 2014 students, universities and industries benefitted from these collaborations' increased performance, contributing to the total U.S. research development and basic research, 14% and 49% respectively, in spite of negotiation challenges facing research collaborations (Burnside & Witkin, 2008; National Science Foundation, 2014). The 2014-2015 impact of increased student and alumni employment due to partnerships between university and industry in the United Kingdom included the byproduct of increased university-owned companies that subsidized nearly 34,000 new jobs (Universities UK, n.d.). Furthermore, the economic impact of student mobility is supported by research data asserting that $35 billion was added to the U.S. economy in 2015, and over £23 billion was added to the U.K. economy in 2014 (Institute of International Education, 2017; Kelly, McNicoll, & White, 2014).

In spite of some real-world challenges, the fluidity of students and employment opportunities continue to influence tertiary enrollments positively in the United States and the United Kingdom. International student tertiary 2015-2016 enrollments increased

7% to over 1 million in the United States according to the latest IIE report. Slightly over 30% of all undergraduate mobile students elect to study in the United Kingdom, which persists as the leading destination choice for American students (Institute of International Education, 2017). The British Council reports over 4 million mobile students are currently studying in the United Kingdom, with the expectation of persistent annual enrollment increases (British Council, 2017).

Higher education cultures are as varied and unique as the institutions represented across the world and, as Fugazzotto (2009) specified, must yield "tangible form" (p. 287), to have an impact on all stakeholders and institutional performance, making advising an integral part of the global student success commitment. When researching the cultural systems of higher education, Strayhorn (2014) fittingly described advisers as, "cultural navigators" assisting students "like a high-tech global positioning system" (p. 59), to navigate their culture by encompassing degree requirements, traditions, customs, values, jargon, policies, personal and career goals into their teachings.

Vincent Tinto, award winning faculty and perhaps the most cited researcher of tertiary student persistence, highlighted five universal conditions, according to Tinto and Pusser (2006), that must exist as "institutional commitment, institutional expectations, support, feedback, and involvement or engagement" (pp. 6-8), for student success in higher education. Although these five conditions are not presented in any specific order, a secure foundation for student success begins with institutional commitment. These five conditions also align with Banta's (n.d.) conditions for a culture of evidence: planning (identified assessable outcomes) and support both commence with institutional commitment, implementation (instrumentation) is guided by clearly outlined institutional

expectations, established evaluation and assessment methods (data analysis) become the formal basis for feedback; and lastly to close the feedback loop, both feedback and improvement (findings) integration reinforce involvement or engagement initiatives.

Establishing an advising culture of evidence in the student affairs side of the house, a knowledgeable institutional partner of holistic student success, as surmised by Oburn (2005), starts with the institutional expectation "not only [to] measure the effectiveness of instructional programs but also assess the quality and contributions of support services and other cocurricular programs" (p. 20), to achieve a holistic understanding of student learning (Keeling & Dungy, 2004; p. 20).

Indoctrinating an advising culture of evidence secures the ability for a continuous learning loop impacting the effect of advising on student learning. This instructional loop begins with developing an advising plan by asking important questions about advising student learning outcomes, then designing and implementing programming impacting advising assessment practices, evaluating advising assessment practices by identifying failures and successes, using assessment data for advising co-curricular improvement(s), and as Oburn (2005) emphasized, to help students define and "reach their educational and career goals" (p. 22), and then repeating the advising culture of evidence "loop" to become, or remain, responsive, agile and accountable (Kniola, 2013; Maki, 2010).

Culture of Evidence

Planning and Budgeting

Assimilating Banta's (n.d.) culture of evidence into advising assessment begins with planning and budget. This entails identifying assessable advising SLOs guided by

the development and alignment of the advising mission, vision and goals strategic framework with institutional mission, vision and goals strategic framework; creating advising assessment programming based on assessable advising goals and performance indicators and culminating with advising reporting.

Mission

A mission statement, referred to interchangeably as strategy, identity, imperative, aim, or purpose statement is a strategic and cultural tool that often has multi-dimensional fulfilling purposes such as guiding the language of internal and external communications, serving as stakeholder inspiration and motivation, and defining institutional intentions (Babnik, Breznik, Dermol, & Trunk Širca, 2014; Cady, Wheeler, DeWolf, & Brodke, 2011; Khalifa, 2012; Kopaneva & Sias, 2015). After investigating mission statements of tertiary institutions, Morphew and Hartley (2006) theorized, that "not having a mission statement begs the very legitimacy of a college or university" (p. 456), not something an institution wants to convey intentionally. A historical analysis of university missions, by Scott (2006), reveals an evolution to an international focus with three main concepts of "the transformational nature of mission, the multiplicity of missions, and service as a major theme running through all missions of the university across epochs" (p. 33), as a departure from business as usual. However, one needs to be careful, as Allison Jr. (2007) instructed, so as not to confuse "traditions and habits for mission and values" (p. 120), when constructing a mission statement.

While studying the differences among 23 European university mission statements, Bugandwa Mungu Akonkwa and Lowe (2010) found, the majority of European

university mission statements underscored "distinctive competences, competitive position and competitive strategy of institution" (p. 9), focusing on strengths that differentiate. In the creation of an advising mission statement, Grites, Miller, and Givans Voller (2016) found, that this exercise compels discussions about "definitions, institution or department philosophies, and organizational models of advising" (p. 49), lending a thoughtful approach in the development of the mission statement. Furthermore, advising missions must be focused on the development and commitment to students' educational and career goals (Campbell & Nutt, 2008; Hughey & Hughey, 2009).

An effective mission statement that aids an advising culture of evidence must align with the institutional mission and strategic framework, must engage and be supported by key stakeholders, and must be clearly stated (Habley, 2005; Kinzie & Kezar, 2006; Maki, 2010; Palmer & Short, 2008). Aligning advising mission with institutional mission and strategic framework, as asserted by Habley (2005), requires isolating statements within the institutional mission that are focused on students and student success initiatives and then asking, "How can our advising program contribute to the realization of this mission?" (para. 2), for identifiable alignment.

The creation of a mission statement may also face challenges as Bartkus, Glassman, and McAfee (2000) found, while researching the validation of mission statements such as appearing "redundant" (p. 24), to those advising stakeholders already invested in the institution, creating an inability to be agile if very focused and therefore limited in guidance for real-time advising decisions—all in the face of enrollment competition and reduced financial resources.

An operational advising mission statement underpins the development of academic advising vision and goals (Banta, Palomba, & Kinzie, 2014; Gordon & Habley, 2000; Habley, 2005).

Vision

An advising vision statement should be viewed as a living document that represents advising principals, agreed upon future and ongoing goals that impact student success and must be aligned with institutional vision. (Abelman, Atkin, Dalessandro, Snyder-Suhy, & Janstova, 2007; Khalifa, 2012; Kopaneva & Sias, 2015; Richardson, 2004; Senge, 2014). A university's vision statement, as claimed by Abelman, Atkin, et al. (2007), outlines "the kinds of educated human beings it is attempting to cultivate and its expectations for incoming students … This information is best relayed through the hub of student services" (pp. 13-14), including advising unit(s).

Using the Apollo 7 voyage as a vision analogy, Albrecht (1995) introduced, the term bifocal vision to emphasize an inclusive arc of current and future events to define and modify "the enterprise" (p. 18), as it evolves. Action-oriented vision, a term pioneered by McClellan (2007), combines the possible "with a viable plan for its achievement" (p. 44), as a tangible undertaking. Likewise, a vision statement addresses the fissure between the status quo and potential future transformation (Richardson, 2004).

Successful vision statements, as outlined by Kantabutra (2011), include seven traits: "brevity, clarity, future orientation, stability, challenge, abstractness, and desirability or ability to inspire" (p. 131), that are directly associated with effective and sustained performance. Effective vision statements also unite stakeholders by collectively

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harnessing each stakeholders' efforts toward future goal achievements (Abelman &

Dalessandro, 2008; Berson, Waldman, & Pearce, 2016). The uniting of stakeholders and

their efforts, as asserted by Levin (2000), is where "traditional vision statements" (p. 93),

tend to consistently be ineffective. Moreover, the alignment of advising vision statements

with university vision statements becomes a challenge when university vision statements

omit a focus on student success. A 2011 study of public Turkish university vision

statements revealed that a majority of the vision statements focused on services related to

institutional research efforts (Özdem, 2011). Another challenge with "visioning" is that it

is usually approached as an event rather than a necessary on-going process (O'Neil,

1995).

An advising vision statement, as surmised by Campbell (2008), "reflects the

aspirations of what … advising can be on a campus. It represents a desired or ideal

future" (p. 235), of the institution. The advising vision statement then becomes the

catalyst for adaptive action and future oriented advising practices. Advising

professionals, according to Abelman, Dalessandro, Janstova, Snyder-Suhy, and Pettey

(2007), must:

> give particular attention to the vision or ancillary information that accompanies the
> mission statement because therein lies much of the observability found in institutional
> vision, without which the desired advising outcomes, as well as the practicality and
> pragmatics related to an advising operation, are significantly less evident. (p. 30)

Understanding the historical context of advising, in addition to being familiar with

the mission, vision, and goal statements, as theorized by Drake, Jordan, and Miller

(2013), "influences advising delivery and should also be understood by the adviser as it

likely affects the model used by the institution" (p. 184), thereby strengthening their

practices.

A versatile advising vision statement aligns with the institutional vision, engages key stakeholders, is clearly defined, stimulates a process that guides advisers in understanding the advising system, and guides stakeholders in the development of advising goals and programming. Moreover, an advising vision statement guides the advising assessment process to better comprehend the impact of advising in regards to student learning success and is effective when done in an ongoing, reflective, and evidential manner (Cate & Miller, 2015; Grites et al., 2016). A substantive advising vision statement, as Salmi (2009) stated, translates into "concrete programs and targets" (p. 52), influencing the foundational development of an advising culture of evidence.

Programming

Operationalized advising programming resulting in advising assessment provides an understanding of advising effectiveness on student learning outcomes and informs stakeholders of the integral contributions advising makes to student learning, growth, and development. Understanding the utilization of assessment is no longer optional; initial considerations for any university's advising assessment plan include clearly defining advising goals and being observant of the advising assessment process and methods for summative and formative purposes (Du, 2016; Frederick et al., 2015; Harvey & Stensaker, 2008; Reinarz & Ehrlich, 2002; Troxel, 2008). Also important are forming and communicating advising learning outcome expectations aimed toward student success (Banta et al., 2002). Furthermore, advising programming and assessment must be collaborative, culturally integrated, and continual (Banta et al., 2002; Wiseman & Messitt, 2010). Assessment complements constructive advising programming and when

combined, both assessment and advising become, as Light (2004) concluded, "policy

tools, undertaken for the purpose of campus improvement rather than just to satisfy an

external demand from a legislature, higher education board, or accreditation group" (p.

15), informing improvements focused on student success.

Goal setting, a function of advising, must be aligned with institutional strategic

goals. Advising SLO goals must be measurable to understand student learning successes

and failures and to inform improvements. Key performance indicators (KPI) are a

reflection of established goals and, as Popova and Sharpanskykh (2010) found, they are

"used to define goal patterns which are properties that can be checked to be true or false

for the organization, unit or individual at a certain time point or period" (p. 510),

providing dated trends that may require action. Higher education goals and indicators

often direct advising efforts and resources toward specified learning outcomes, targeted

graduation and retention rates, academic progression, and career preparation of student

populations (Beatty & Koenig, 2012).

The Council for the Advancement of Standards in Higher Education (CAS)

included the expectation of "programmatic … advising goals … that result in the entire

student learning process" (Robbins, 2014, p. 29), within their general standards

established in 1986. Goals and KPIs keep the focus of everyone's efforts and actions on

relevant advising SLO goals through explicit communication of expected future

conditions that support advising and are a fundamental attribute of advising for students

(Campbell, 2008; Cohrs, Shriver, Burke, & Allen, 2016; Locke & Latham, 2006).

Furthermore, established advising SLO goals distinguish substantive measurable

strategies and actions and identify those responsible for advising programming and assessment (Aldejwi, 2014; Drucker, 2003; Gurley, Peters, Collins, & Fifolt, 2015).

An exercise of goal setting often incorporates a 1990's constructed acronym, S.M.A.R.T., that O'Neill, Conzemius, Commodore, and Pulsfus (2006) assert, represents "Strategic AND Specific, Measurable, Attainable, Results-based and Time-bound" (p. 13), dynamics. A goal properly set is halfway reached—a quote credited to former U.S. President Abraham Lincoln and well-known motivational speaker Zig Ziglar. This quote emphasizes that there is more, not less, work to be done once goals are established. Recommended involvement of all stakeholders reaps advising SLO goal achievement benefits by fostering, as Banta, Lund, Black, and Oblander (1996) noted, "comfort level with identifying goals, discussing assessment of progress toward the goals in a non-threatening, non-personal manner, and identifying developmental needs" (p. 78), within a created safe environment.

To establish what is taught and measured constructive advising programming is guided by clearly outlined goals to be achieved and the determination of why each advising SLO goal is relevant (Suskie, 2009). Established advising SLO goals determine assessment practices. Examples of advising goals relating to SLOs, as synopsized in the Smith and Allen (2014), U.S. multi-institutional advising influence study disclosed 5 cognitive (know) and 3 affective (value) learning outcomes. The 5 cognitive learning outcomes include having knowledge of degree requirements and educational goals; understanding how things work; having knowledge of resources and where to gain help; understanding connections between academics, career, and life goals; and having an educational [and career] achievement plan. The three affective learning outcomes include

valuing their adviser-advisee relationship, being supportive of mandatory advising, and

developing a positive and significant relationship with an institute employee (p. 56).

Eight examples of advising goals as they relate to student satisfaction, an advising criteria

most often researched, set forth in Habley and Morales (1998) generalizable study,

included:

> A. Assisting students in self-understanding and self-acceptance; B. Assisting students in considering life goals by relating interests, skills, abilities, and values to career, the world of work, and the nature and purpose of higher education; C. Assisting students in developing an educational plan consistent with life goals and objectives; D. Assisting students in developing decision-making skills; E. Providing accurate information about institutional policies, procedures, resources, and programs; F. Referring students to other institutional or community support services; G. Assisting students in evaluating or reevaluating progress towards established goals and educational plans; and H. Providing information about students to the institution, college, and or academic departments (p. 36).

Illustrations of career advising goals relating to SLOs include having knowledge

of vocational options/apprenticeships and career goals, having knowledge of campus

career resources, critical student assessment of their academic and work experiences,

student goals and beliefs and their gained knowledge of the correlations between their

experiences, and goals and beliefs allowing the ability, according to Barbour (2016), to

"think aspirationally" (p. 16), in building their career plan (Barbour, 2016; Smith &

Allen, 2014). Goals relating to advising that cross both academic and career advising

fields include leadership proficiencies, organizational and planning aptitudes, in addition

to relationship-forming skills resulting in the development of independent, economically

engaged, and critically thinking individuals with objectives of improving circumstances

for themselves and others (Damminger, 2009).

Various arguments dispute the benefits of goal setting, such as imposing a limited

focus on matters outside of designated advising SLO goals, an eagerness of those

involved to take the shortest or easiest path to advising SLO goal achievement in an effort to check a box of accomplishment, the potential escalation of unethical advising behavior, and biased risks related to advising SLO goals (Worden, 2014). In addition, institutional culture erosion is impacted by ever-increasing advising workloads and diminished advising professional autonomy that contributes to decreased motivation of advising professionals (Atkinson-Grosjean & Grosjean, 2000; Schweitzer, Ordóñez, & Douma, 2004; Worden, 2014).

Once the specification and institutional alignment of the advising mission, vision, and goals; along with the involvement of stakeholders, the endorsement and implementation of advising programming, and the securement of human and financial resources have occurred, then the formalization of an operationalized advising culture of evidence that continuously measures advising SLOs through assessment is required (Tweedy, 2016).

Reporting

A primary aspect of an advising culture of evidence is the establishment of an effective advising assessment practices reporting plan. An adaptable framework for reporting results of advising assessment practices, as Tophoff (2013) surmised, based on Professional Accountants in Business (PAIB) industry recognized criteria, would be adjusted correspondingly:

(a) leadership and institutional commitment to the reporting of resultant advising assessment practices; (b) the appointment of appropriate advising personnel that will collaborate with all involved in the reporting process; (c) the establishment of an advising assessment practices reporting cycle; (d) gaining an on-going understanding and alignment of internal and external advising assessment stakeholder information needs; (e) the defining, analyzing and interpretation of

the contents of the advising assessment practices report; (f) the optimization of advising assessment practices reporting with various communication outlets, and (g) the establishment of advising assessment practices reporting compliance processes for sustainable success (p. 6).

Admittedly a common platitude, that nevertheless remains very relevant today, is that communication is key. Clear and consistent communication of resultant advising assessment practices serves two functions: 1) apprising stakeholders who engage in advising assessment and 2) enlightening all stakeholders of compelling findings (Busby & Gonzalez Robinson, 2012). Once it is determined when and how often to convey findings obtained from advising assessment practices, it is essential that the reporting occur in ways that are meaningful to the campus and community (Banta et al., 1996; Suskie, 2009).

The reporting of obtained advising assessment practices data strengthens an advising culture of evidence and serves the community in many ways, including: summarizing student learning successes, highlighting employees' contributions and commitment to advising assessment work thus demonstrating cross-disciplinary advising assessment work among colleagues, outlining programming outcomes and advising assessment best practices, and recognizing stakeholders' support of the advising assessment culture (Busby & Gonzalez Robinson, 2012). When the reporting of advising assessment practices is done well, it details an advising "big picture" in concise language that everyone understands and provides the basis for stakeholder action (Banta et al., 2014; Suskie, 2009).

To increase message attainment by the targeted audience, the reporting of advising assessment practices should be accurate and integrate conventional visual reinforcements such as tables, charts and graphs (Pike & Rocconi, 2012). Likewise, the

reporting should occur in a variety of constructs including annual reports, dedicated websites, captioned videos, electronic newsletters and conference presentations (Banta et al., 1996; Busby & Gonzalez Robinson, 2012; Suskie, 2009). The reporting of both positive and negative results of advising assessment practices, as Light (2004) endorsed, is "critical for assessment to work well" (p. 12), and sustains a reputable advising culture of evidence.

<div align="center">Implementation</div>

Implementation (instrumentation), the second element of Banta's (n.d.) culture of evidence, is the process that converts advising initiatives into actionable objectives and moves stated goals from theory to practice and from rhetoric to application (Olsen, n.d.; Orphanides, 2012). Although the implementation phase of an advising culture of evidence is often faced with challenges, Olsen (n.d.) observed, that implementation is "a fundamental … practice that's critical for any strategy to take hold" (p. 1), despite challenges. Implementing advising assessment based on designated advising SLOs in HEIs typically requires change in some form, and change is frequently unwelcomed and challenged by the higher education community. To some extent, this can be attributed to established decentralized institutional and complex systems, embedded shared governance, and a culture steeped in tradition (Heaney, 2010; Kezar, 2013; Lane, Zimpher, & Aiken, 2015). In addition, limited financial and human resources impact advising assessment (Finley, 2009; Hughey et al., 2009). A byproduct of persistent limited resources in higher education advising is the almost relentless task of administrators to generate strategic decisions while, as posited by Bodley-Scott and Brache (2009), focusing "an eye on the horizon … to succeed" (para. 2), and thrive in

spite of those limitations (Bourne, 2011; Edinger, 2012; Punniyamoorthy & Murali, 2008). Moreover, as university change agents, Teitelbaum (1994) speculated, that advisers "recognize areas where change in the campus environment can lead to greater student satisfaction, increased student retention, and improved institutional effectiveness. Advisers are well situated to recommend new policies and programs in response to the need for change" (p. 32), as integral institutional partners.

To plan advising assessment implementation tactically, Proctor, Powell, and McMillen (2013) found, that initiatives need to be named, defined, and operationalized to make them "more comparable and evaluable, and ultimately make it easier for … implementation stakeholders to make decisions about which implementation strategies will be most appropriate for their purposes" (p. 5), and prioritizing accordingly. A potentially effective strategic advising assessment implementation strategy that could create a competitive advantage within higher education might include an adaptation of Edinger (2012) organizational implementation advice that underscores the utilization of three Cs: (a) clarify advising assessment implementation strategies, (b) communicate advising assessment implementation strategies, and (c) cascade the advising assessment implementation strategies (pp. 1-2, 4). Advising assessment implementation failures, that can be attributed to what would be considered apparent and even avoidable perils to most advisers, include a lack of ownership, communication, accountability, progress reporting, and empowerment (Olsen, n.d.).

The Assessment Guide authored by Dr. Peggy Maki (2002), a distinguished U.S. higher education faculty and globally recognized student learning expert, was produced to learn extensively about student learning and endorses the sophistication of previously

outlined advising assessment implementation recommendations. Dr. Maki discerned eight

criteria as endeavors in pursuit of attaining assessment credibility, modifiable for

advising and involves the following: aligning with institutional strategic frameworks;

engaging stakeholders; identifying faculty, staff, and administrators assigned to advising

assessment responsibility; detailing expected advising SLOs; identifying where the

advising student learning outcomes will be addressed; determining advising methods and

criteria; stating advising level of expected performance; and identifying and collecting

baseline advising SLOs' information (pp. 9-10). Another factor contributing to the

credibility of advising assessment, as proposed by Proctor et al. (2013), persists in

providing a supportive theory for each implementation strategy to emphasize anticipated

change(s), thus leading to "the how and why strategies might work" (p. 7), and what

makes sense for the institution and student success (Birnbaum, 2000; Kezar & Eckel,

2002).

Collecting and measuring advising assessment data can and should be performed

through multiple constructs (Banta et al., 2014; Bowman, 2009; Damminger, 2009; He &

Hutson, 2016; Hurt, 2004; Robbins, 2009; Suskie, 2009; Wall, 2012). Trusted assessment

instrumentations generate purposeful, accurate, truthful information, thus providing

leadership with more effective decision-making in this technology—and information—

driven age (Abell, Springer, & Kamata, 2009; Banta et al., 2014; Colton & Covert, 2007;

Suskie, 2009, p. 233). Assessment instruments designed to measure the effect of advising

on student learning that are based on agreed-upon criteria can employ direct or indirect

approaches. Direct measures of learning represent students' knowledge and abilities

while utilizing the specific instruments such as tests, essays, presentations and

assignments. Indirect measures of learning require student reflection and feedback through surveys or interviews (Banta et al., 2014; Jiménez & Cleeremans, 1996; Weldy & Turnipseed, 2010). Performance measures often used in both direct and indirect approaches serve to examine and relay the effect of advising on student learning and are important due to their concentration on the advising process, outputs and outcomes of program actions (U.S. Government Accountability Office, 2005).

Advising assessment implementation, a multi-layer process, is successful once initiatives become actionable objectives and defined goals that go beyond theory become practice impacting the effect of advising on student learning outcomes. Dynamic advising assessment implementation contributing to an advising culture of evidence accomplishes the following: obtains the backing of leadership and stakeholders; aligns to institutional strategic goals; fosters employee professional development; performs on-going initiative analysis to determine improvements, modifications or even omissions; advances trusted advising assessment instrumentation(s); executes multiple advising assessment measurements; and features communication of strong internal and external results-driven advising assessment practices with a focus on obtaining a competitive advantage in a very competitive and global higher education market (Banta et al., 2002; Suskie, 2009).

<center>Evaluation</center>

Evaluation (data analysis), the third element of Banta's (n.d.) culture of evidence as it pertains to advising assessment practices, entails an examination of elements such as students' prior learning, designated learning outcomes, advising performance indicators, management of advising information and analysis, advising programming cost analysis,

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web-based advising evaluation tools, advising program review, and institutional

accreditation (Maki, 2010). Evaluation, through the lens of international development

programming, is a practice that:

> attempts to systematically and objectively assess progress towards and the
> achievement of an outcome. Evaluation is not a one-time event, but an exercise
> involving assessments of differing scope and depth carried out at several points in
> time in response to evolving needs for evaluative knowledge and learning during the
> effort to achieve an outcome. All evaluations … need to be linked to outcomes as
> opposed to only implementation or immediate outputs. (United Nations Development
> Programme, 2002, p. 6)

Evaluation is often used synonymously with assessment and frequently identified

as either formative or summative (Astin & Antonio, 2012; Bowman, 2009; Kramer,

1982; Oburn, 2005; Robbins & Zarges, 2011). Formative evaluation occurs throughout

the assessment cycle and summative evaluation occurs at the end of the assessment cycle.

Separately, both evaluation forms are important; however, when combined, they

create a more holistic and powerful evaluation process (Woodbury, 1999). Methods of

assessing and enhancing advising SLOs are as varied as each institution, including three

adoptable evaluation concepts recommended by Suskie (2009). These include evaluation

judgments that reinforce improved advising student learning and decision-making,

evaluation that determines the correlation between intended and actual advising SLOs,

and evaluation that studies and ascertains the quality of advising assessment practices

versus advisee learning (p. 12). However, one could argue that if the third concept

advocated for the evaluation of the quality of advising assessment practices and the

quality of advisee learning together, the credibility of an advising culture of evidence

would be strengthened.

Prior Learning

Prior learning assessment (PLA) is a qualitative and quantitative reflective exercise of a student's previous learning and experiences employed, as Stenlund (2010) discerned, to "recognize and acknowledge individuals' competence and knowledge regardless of how and where it has been acquired" (p. 784), derived from a 1970s phenomenon that eventually took hold in higher education (Brigham & Klein-Collins, 2011; Kamenetz, 2011; p. 784; Stevens, Gerber, & Hendra, 2010; Zucker, Johnson, & Flint, 1999). Incorporating prior learning in the evaluation of the effect of advising assessment practices on advising SLOs, as the European University Association (2008) found, "is particularly important in the context of lifelong learning in a global era where knowledge is acquired in many different forms and places" (p. 6), supporting the need for a co-curricular culture of evidence (Bateson, 2003; Sanséau & Ansart, 2013).

Higher education methods used, as Singh (2015) underscored, to extract "formal, informal, and non-formal" (p. 156), prior learning include the review of educational and career documents, portfolios, non-accredited training materials, standardized tests, independent study reports, along with other verifiable competencies and knowledge demonstrations such as exams, presentations, papers, and apprenticeship/employment contributions (Beard, 2007; Conrad, 2008; Moldoveanu, 2009; Stenlund, 2010; Stevens et al., 2010). Prior learning assessment has typically been associated with adult higher education and lifelong learning assertions; however, with mobile student bodies, enrollment competition, and a focus on student success in and beyond their tertiary education those constraints are no longer related (Aarts et al., 1999; Funk & Bradley, 1994; Stenlund, 2010; Stevens et al., 2010). Thus, the integration of the PLA method of

portfolio use as one acceptable teaching and evaluation tool of an advisee's experiential

competence and knowledge has segued into the advising field.

Advising portfolios utilized in HEIs, often electronic versions of a traditional

academic or career student portfolio, as Stevens et al. (2010) determined, involve

advisees as active learners "to engage in meaning making" (p. 380), in their journey with

the goal of transformative learning (Ambrose & Williamson Ambrose, 2013). Advising

portfolios provide yet another purposeful and dynamic opportunity for advisers to teach

students to be more cognizant of what they know, do and value, thus contributing to their

learning through on-going credentialed documentation and discussion of their

introspective submissions (Enszer & Kuczenski, 2011; Sweat-Guy & Buzzetto-More,

2007).

Advising portfolios maintained by advisees at High Point University include at

least seven documents: matriculation sheet, education plan(s), transcript(s), current

academic schedule, copies of notices, withdrawals and add/drop forms, and other

pertinent material to their education and career planning (High Point University, n.d.).

The University of Ulster utilizes a student e-portfolio system that not only retains specific

student artifacts, but can also be used to record and chronicle adviser meeting outcomes

(Madden, 2007). Career education and guidance in Wales includes e-portfolios that

include "skills development, education and vocational achievements, and career plans"

(Clark & Talbot, 2006). These artifacts are performance factors that assist in the

evaluation of the effect of advising assessment practices on advising SLOs to more

comprehensively understand what advisees know, do and value. Portland State

University's School of Business, as Schaffhauser (2015) found, shares their student's

course e-portfolio materials on a "career-oriented social sharing site" (para. 1), thereby extending the value of the portfolios beyond graduation, something all HEI portfolios should inherently accomplish.

Learning Outcomes

Learning outcomes formulate, as Gil-Jaurena and Kucina Softic (2016) discovered, the standards that influence "quality assessment in higher education and continuing education institutions in Europe and worldwide" (p. 1). The foundation of advising student learning outcomes was built on curricular learning outcomes and assessment research by experts and organizations such as Peggy Maki, Trudy Banta, Linda Suskie, the Bologna Process, the European Higher Education Area (EHEA), the European Union (EU), the National Institute for Learning Outcomes Assessment (NILOA), and the Council for the Advancement of Standards in Higher Education (CAS). In establishing learning outcomes Banta et al. (2014) cautioned, an acknowledgment of differences that exist among "intended and actual" outcomes. Outcomes that are intentional are represented "in statements of expectations for students," while "actual outcomes" are represented "in the results of assessment activities" (p. 4), signifying distinctive differences.

Useful and influential advising student learning outcomes, as surmised by the NILOA organization, "inform effective educational [and advising] policies and practices" and should not be created with a linear goal to "meet compliance demands by external groups" (p. 5), and remain focused on student success. Learning outcomes, inclusive of vocational education, according to European Centre for the Development of Vocational

Training (Cedefop) (2009) study found, that learning outcomes "are best understood as a collection of useful processes and tools that can be applied in diverse ways in different policy, teaching and learning settings" (p. 10), representing curricular and co-curricular learning in a more holistic approach. Advising SLOs not only evolve as each advisee advances in his/her educational and career journey, but aligning the learning outcomes to institutional mission, vision, goals, and strategic framework also makes learning outcomes as unique as each institution and student.

A chief administrator at the Institute of Higher Education Policy that specializes in international issues, Clifford Adelman, deconstructed the design of cognitive learning outcomes through language which can be assimilated to the design of advising SLOs. Mr. Adelman found that learning outcomes must center on the actions of the student (verb use), be scripted in the present tense, applied to both formative (aptitude) and summative (capability) assignments, and ultimately designed for student actions that occur only during a student's enrollment at the institution (Adelman, 2015, pp. 7-9). Moreover, Adelman discovered that disciplinary specific learning outcomes, like advising SLOs, ignore the present tense recommendation and are often written to reflect a belief of what the level of student preparedness will be for a career into the future (p. 10). However, the Institute for Public Policy Research (2013) commission suggests, that the attitude toward vocational learning in England as being the path for students who do not succeed academically (i.e., level 4 and higher) needs to change and obtain increased credibility for the students. In addition, with a focus on lifelong learning, it is important to assure smooth transitions from vocational experiences into higher education for each student.

The process of designing advising SLOs can be involved, however, when done well a consequence is a clearer understanding of the teaching methods needed by advisers in teaching their advisees, and the learning outcomes are apt to guide advising meetings and strategies while engaging advisees in the process (He & Hutson, 2016; Martin, 2007; Robbins & Zarges, 2011). In addition, the former University of Notre Dame associate dean of advising and academic programs, Holly Martin (2007), stressed that advising learning outcomes must be designed with a focus on student behavior (verb use) that makes learning achievable and measurable, subsequently resulting in a more comprehensive and evolved understanding of advising as teaching and the learning processes.

The path of an advisee's journey certainly influences established advising SLO goals. Goals for the early years of advising learning outcomes could include how to self-advocate with faculty/lecturers, how to schedule meetings or take advantage of career counselor's office hours, how to interpret a degree audit, setting realistic course/apprenticeship time management and effort necessary for success, and knowing the rationale for their academic and career/vocational curriculum. Moreover, goals for the final years of advising SLOs could include expressing the connection between their education and learned skills beyond college, researching study abroad and/or apprenticeship opportunities, examining their goals and choices of college and apprenticeship experiences that impact potential careers upon graduation (Banta et al., 1996; Drake et al., 2013).

Achievement of determined advising SLOs occurs more often if, as Strommer (1994) asserts, "we move away from the adviser as an expert dispensing wisdom in one-

to-one advising encounters and toward the adviser as a designer of meaningful tasks and facilitator of structured work with cooperative groups" (p. 94).

The attainment of advising SLOs provides institutional stakeholders a performance advantage with indicators that describe, measure and showcase the effectiveness of the advising partnership.

Performance Indicators

Motivated by the education and career quality movement in the 1980s, performance indicators, also referred to as key performance indicators (KPIs) to emphasize their significance, were adopted in higher education to demonstrate on-going disciplined implementation and achievement of institutional mission and goals (Ballard, 2013). In institutional practice, performance indicators are directly relational to performance and apt to promote benchmark distinctions (Burquel & van Vught, 2010; Paige, 2005; Popova & Sharpanskykh, 2010; Song & Lee, 2013). Some European countries implemented strategic performance indicators in HEIs at least a decade earlier than in the United States (Rhoades & Sporn, 2002). Indicators continue to assist with, as Gaither (1994) emphasized, "making national or international comparisons in educational quality, effectiveness, and efficiency" (p. 17), influencing factors considered by mobile students (Organisation for Economic Co-operation and Development, 2017a).

Performance indicators are usually associated with an assurance of both quality and accountability in higher education and, as enterprise transformation expert David Parmenter suggested, they have a "focus on the aspects of organizational performance that are the most critical for the current and future success of the organization" and are

essential for an organization's "wellbeing" (Parmenter, 2015, p. 7). Divergence in

definitions of performance indicators exists as some accentuate "performance" or

"indicator," and still others stress "measures" (Floyd, 1997, p. 1; Gaither, 1994, p. 18). A

2013 study of U.S. Carnegie classified 4-year higher education institution's KPIs by Paul

Ballard calls for a "common set of metrics that are both meaningful for internal

continuous improvement and external communication of those continuous improvement

efforts" (pp. 146-147). A 2015 four-month study that explored the quality of initiatives

and strategies in European HEIs calls for, as Wächter et al. (2015) found, the "creation of

an international database" of common KPIs to be overseen by "trusted international

actors, like the EU, the OECD or the UNESCO" (p. 78), to promote consistency.

A review of pertinent literature regarding KPIs reveals an absence of research

specifically relating to advising KPIs in higher education. However, as noted earlier,

advising KPIs need to reflect advising goals and be evaluated to identify goal patterns at

specified time periods to signal efficiency and effectiveness, or lack thereof, of advising

assessment practices and resources. California State University, Chico attempted a listing

of advising KPIs obtainable online in draft form, encompassing: a predetermined

percentage of completed student academic plans ready for orientation, a predetermined

percentage of freshman and transfer students who would attend summer orientation and

learn general education and degree requirements, a predetermined percentage of

undecided and academic probation students who would meet each term with their

adviser, and the expectation of a high percent of student responses to advising assessment

survey questions that would be positive. Additional advising KPIs include systematically

evaluating the effectiveness and impact of advising efforts on one-year persistence,

student's good academic standing after one year, and academic difficulty leading to attrition (California State University Chico, 2007, p. 1).

Although University College Dublin's 2015-2020 Strategic Plan focuses on objectives, the 2014 Strategic Plan outlined KPIs specifically related to three areas: education, research, and innovation and partnerships. Absent is a section devoted to advising KPIs, however advising is outlined as a priority in two subsections of the plan: education (4.2) and enabling foundations (7.6). These sections emphasize targeted involvement of advising on high achieving students, first-year students, and enhancements to programming; moreover, a commitment to adviser engagement and the creation of an "integrated student-support model" (University College Dublin, 2010, p. 36). In their five-year institutional goals and initiatives plan, Texas State University (2014) included a separate section highlighting 4 advising programming KPIs that included:

1. Number of students served (i.e., walk-in, email, phone, appointment, social media). 2. List of professional development opportunities provided to academic advisers for consistent messaging. 3. Number of external professional development opportunities attended by the number of advisers. 4. Number and list of current internal and external awards and recognitions received by advisers and adviser/student ratios compared to prior year (section 3.3).

The best indicator of student learning, according to Scroggins (2004), "can be expressed better as a narrative or a performance than as a number" (p. 18). Distinguishing advising KPIs focused on advisee SLOs considered critical for each advisee's current and future success and, therefore, fundamental to both the advisee's and institution's wellbeing will be directly relational to student and institutional performance. Furthermore, distinguished advising KPIs will assist upper administration with making valuable resource decisions in determining advising resource prioritizations through

implementation and achievement of advising KPIs. Moreover, advising KPI results offer an evaluation and understanding of whether the implemented advising KPIs should be improved, modified, or omitted from advising assessment practices while keeping the focus on SLOs improvement and student success. The measurement of advising KPIs leads stakeholders beyond an understanding of just the higher performance goal(s) to an innate comprehension of good practice (van Vught et al., 2008).

Management Information and Analysis

Data that are not carefully managed, analyzed, and interpreted are elusive stand-alone numerical figures. However, when carefully assessed, analyzed, and interpreted data convert figures into more comprehensive knowledge integral to an advising culture of evidence. Data are the foundation the story is built upon (Dando & Thornton, 2014; Petteri et al., 2009). The management of assessment practices' effect on advising SLOs has become a very necessary and intricate support process, and management consideration for the implementation of a systematic, support process cycle is recommended (Banta, 2002).

The management of advising assessment practice data to inform decisions and initiate change is not a new trend for higher education leaders; however, the emphasis of assessment has intensified in the United States, the United Kingdom, Netherlands, Canada, Belgium, South Africa, Australia, and New Zealand (Datnow & Park, 2014; Heywood, 2000; Knapp, Swinnerton, & Copland, 2007; Metcalfe, 2006; Selwyn, Henderson, & Chao, 2015). Factors such as student mobility, fierce enrollment competition, consumer and industry expectations and technology have transformed both

the importance and use of data and the deeper knowledge data provide, thereby providing a vital function in higher education through accountability and a potential competitive advantage. Within higher education there is, as Ujaley (2015) discovered, a "proliferation of digital content pushing learning beyond class-rooms … giving rise to a large amount of structured and unstructured data which can be positively harnessed to improve learning" (p. 3), and build collective responsibility (Datnow & Park, 2014).

Technology is now inextricably tied to data assessment; understanding the size, speed, and impact of data due to the need for quicker, multi-dimensional decisions, and providing the capability to obtain more precise insights and evidence for an ever-increasing expectation of knowledgeable, data-informed leadership (de Jong & Den Hartog, 2007; Feinleib, 2014; Knapp et al., 2007). Technology considerations for data use must earnestly include potential privacy, security, and legal issues (Camenisch, Leenes, & Sommer, 2011; Fayyad, Piatetsky-Shapiro, & Smyth, 1996; Fitzgerald, 2015; Guernsey, 2008).

Higher education leaders now have the ability to investigate student success, according to Ujaley (2015), through the lens of the "student learning pathway based on learning style and capability" (p. 2), due to aggregated data collected through multiple assessment mechanisms (Banta, Jones, & Black, 2009). In addition, students benefit from data, and their advisers, as Hughey and Hughey (2009) emphasized, "are in a key position to help students turn data into information to inform academic and career decision making" (p. 10), impacting their future.

Advising always entails, according to Drake et al. (2013), some degree of "figuring out or interpreting students," and the management of assessment data is a tool

for interpreting "the unknown or difficult to understand, and provides a foundation for the practice of … advising" (p. 226). Analyzing data of advising assessment practices that highlight the impact of advising SLOs provides a more holistic picture of student learning styles and capabilities. Integrated advising assessment data analyses aid advisers in a more complete understanding of the now acceptable advising as teaching philosophy, advising practices, and how both impact student learning with the objective of continuous improvements (Banta et al., 1996; He & Hutson, 2016). In addition, an analysis can uncover potential relationships between advising assessment practices and advising SLOs (Banta, 2002; Powers, 2012).

In developing an advising culture of evidence advising leadership may want to consider adapting these six rationales for managing data assessment—adapted from Knapp et al. (2007) leader's toolkit for both internal and external audiences: (a) diagnose or clarify a specific advising challenge; (b) weigh alternative advising actions; (c) justify chosen advising plan of action(s); (d) comply with external advising information requests; (e) inform and improve advising daily practice; and (f) manage advising meaning, culture, and motivation (p. 77). A data-informed advising leader "sets the pace" among advising stakeholders, assists the advising division to focus on "what really matters," and urges stakeholders to "follow the data, even when the data contradict previously held … beliefs," all in support of student and institutional success (McGann Culp, 2012, p. 148).

When managed and analyzed well, data regarding advising assessment practices that expose the effect of advising on student learning can help leaders communicate a shared and strategic advising vision, unite stakeholders, provide change agency, examine

advising practices and SLOs, and advocate and implement an advising culture of evidence. In addition, advising SLOs, as Palomba and Banta (1999) stated, "reminds us all that we are learners" (p. 346).

The absence of well-managed data regarding advising assessment practices contributes to data management fatigue. A cluttered advising reform landscape filled with advising data cannot provide leadership and stakeholders with a detailed understanding of the impact of advising assessment practices on advising SLOs. Furthermore, if the assessment data does not expose areas of improvement and recognized relationships between advising assessment practices and advising SLOs the exercise will not positively contribute to, nor sustain, an advising culture of evidence (Knapp et al., 2007; Metcalfe, 2006).

Program Cost Analysis

Implementing higher education advising assessment practices that generate student learning outcomes evidence requires identifying key advising assessment components by outlining specific resource and infrastructure costs (Cooper & Terrell, 2013; Darling-Hammond, Cohen, Orr, Meyerson, & Lapointe, 2007). Although financial guidelines for assessment vary by institution, the need and expenditures over the last decade for assessment programming have increased due to accountability demands (Cooper & Terrell, 2013; Sen, 2000; Swing & Coogan, 2010). Some initial advising assessment costs might include purchasing or designing assessment instrumentation, hiring of assessment consultants, additional human capital, employee assessment

development, and potential assessment project grants (Cooper & Terrell, 2013; Palomba & Banta, 1999).

Like most initiatives, the success or failure of initiatives involving advising assessment practices is dependent on available resources. Tertiary institutions all around the globe are expected to do even more with even less human and financial resources. Moreover, a challenge with cost according to Arora (2009) is that it "does not have a definite meaning and its scope is extremely broad and general. It is, therefore, not easy to define" (p. 2.1). Apprehension with cost creates a real struggle in clarifying assessment benefits and, as Swing and Coogan (2010) suggested:

> campuses may focus too much on controlling their spending on assessment without equal focus on maximizing the value of the benefits derived from assessment. As such, there are two opportunities for a campus to influence the cost of assessment; prudence in using campus resources (controlling expenditures), and assurance that assessment results produce tangible benefits (increasing the value). (p. 3)

Applying basic cost accounting principles, implementing well-developed advising assessment practices and review, and instituting cost-savings derived from advising assessment practices are three approaches that can theoretically persuade administrator's decisions to fund and promote advising assessment practices while clarifying benefits of an advising culture of evidence (Banta et al., 2014; McGann Culp, 2012; Swing & Coogan, 2010). Sustainable assessment must be cost-effective and, as Suskie (2009) asserted "the business world's concept of return on investment applies here … to justify the investment" (p. 90). Furthermore, when performing program cost analyses, if the expenditures for advising assessment practices lead to substantial changes and continuous improvements in SLOs leading to proven student success, then the costs associated with an advising culture of evidence are justified (Cooper & Terrell, 2013; Suskie, 2009).

Adaptable program cost-benefit analysis questions to guide efforts of advising

assessment practices include what the costs have been for advising assessment practices

in terms of stakeholder time, dollars, and other resources. What have been the benefits of

advising assessment practices, and how do the costs associated with advising assessment

practices measure against the advising SLOs benefits? What component of advising

assessment practices has taken too much time or effort? (Suskie, 2009). If cost analyses

determine that certain components of advising assessment practices do not add value then

they should be omitted, pursuing only those components deemed valuable and impactful

to an advising culture of evidence (Timm, Davis Barham, McKinney, & Knerr, 2013).

Web-based Evaluation Tools

The dominance of technology in higher education, an operations disrupter, has

made advising web-based evaluation tools an elemental component that reinforces an

advising culture of evidence (Christensen & Eyring, 2011; Christensen & Horn, 2013). A

universal challenge HEIs face is not "whether or how much technology to use but how to

use technology in ways that are consonant with institutional culture and identity to help

students succeed in individual courses, in their college experience, and in their

educational [and career] objectives" (Dahlstrom & Bichsel, 2014, p. 3).

Many HEIs worldwide utilize a web-based evaluation tool known generically as

student information, student record, or student management systems, a tool "integral to

the operations of the university and services offered to students" and encompassing

"virtually all major business processes of the student lifecycle" (Mukerjee, 2012, p. 52).

A 2012 analysis of student tracking systems in European HEIs included assertions by

experts that a majority of European HEIs utilize a type of student record system and found it to be "invaluable within HEIs themselves, not only from a planning perspective, but also as a tool for quality assurance, marketing, administration and the production of statistics" and yet, these systems used in Greek HEIs are utilized for "general administrative purposes though the information available would provide for other uses as well" (Muehleck, 2012, p. 232), such as evaluating student success initiatives. A 2012 report of student information systems (SIS) trends found that almost seventy-percent of U.S. HEIs purchased SIS systems from the top three SIS vendors, with a focus on "mobile devices and mobility applications" (Bonig, 2012, p. 57), permitting potential web connections with students through their cellular phones. Another trend on the horizon for HEIs is migrating their SIS system to remote cloud storage (Bonig, 2012; Catania et al., 2014; Irvine, 2015; Tajkarimi, 2015).

Contemplatively designed Web-based tools promote information consistency, content error reductions, advanced data accuracy, ease of access, capacity for customization of delivery formats, interface capabilities, optimistic user attitudes, and experiences that result in the creation and successful adoption of evaluation tools (Danda, 2009; Feghali, Zbib, & Hallal, 2011; Jones & Hansen, 2014; Lightfoot, 2014). Paradoxically, web-based tools that are not designed purposefully, are not customizable, and are not user-friendly will promote user dissatisfaction and ultimately, rejection and failure of the evaluation tools (Danda, 2009; Feghali et al., 2011; Lightfoot, 2014). Being technological is not the only dependent factor constituting effective advising assessment practices, an intrinsic consequence of web-based evaluation tools. However, factors such as collaboration, thoughtful consideration of defined outcomes, and ease of usability must

be part of the web-based tool design equation—whether the tool is home-grown, an updated legacy system, or purchased from a vendor (Istance & Kools, 2013; Sullivan & Porter, 2006).

Synchronous and asynchronous advising web-based mechanisms such as CASCAiD, LinkedIn, Viadeo, Wikis, Webinars, NEPTU, Canvas, SIS, Microsoft Lync, GoTo-Meeting, Adobe Connect, Blackboard Collaborate, and even social media modalities such as Twitter and Facebook all have evaluative functions assisting in advising students more holistically (Pellegrini et al., 2013). Benefits of these tools are lauded for providing apprenticeship information, career connections, self-inventory modules, ease of making appointments and creating meeting notes, platforms for individual or group advising sessions, on-demand academic and career information access and providing content through various formats (Coughlin, 2013; Jones & Hansen, 2014; Research and Markets, 2017). Moreover, they are tools that compliment deeper stakeholder learning through data-driven analytics (Chen & Lin, 2014; Najafabadi et al., 2015). Web-based advising data can depict important patterns such as top apprenticeships, professional and vocational fields, meeting topic discussions, content accessed most often, content format accessed most often, meeting preferences (individual or group), peak meeting times, and number of meeting requests, all illustrative of peripheral effects of advising assessment practices on advising SLOs.

Some aspects of web-based evaluation tools that may prove invaluable to student and adviser's success include assessing longitudinal data that aids in tracking academic and career progress, obtaining reports that assist in data-driven decisions and initiatives, an intrusive ability for advisers to prevent future student system access through system

holds, monitoring enrollment patterns, monitoring patterns of apprenticeships, and the

collegial partnership created between staff, faculty, and/or lecturers when a student's

academic and career performance and progress are proving challenging (Campbell,

DeBlois, & Oblinger, 2007).

Whether explicit or implicit, involving students and advisers in the continual

learning outcomes process is the main a purpose of web-based evaluation. Furthermore,

web-based evaluation tools can assist advisers in knowing whether alignment between

the "intended learning outcomes and the assessment strategy used" (Gil-Jaurena &

Kucina Softic, 2016, p. 3), did occur. Technology proliferation has led to the requisite

that advisers convey, according to Wilkin, Rubino, Zell, and Shelton (2013),

"technological knowledge domains" (p. 85), compelling advisers' enhanced digital

literacy to inform their efforts impacting the effect of advising on student learning

(Folsom, Yoder, & Joslin, 2015; Keeling & Dungy, 2004). In addition, new institutional

practices such as the utilization of web-based advising evaluation tools, including

advising portfolios, provide experienced advising professionals the ability to advance the

profession through theoretical research opportunities highlighting advising practices

involving such tools (Aiken-Wisniewski, Smith, & Troxel, 2010; Habley, 2009; Jordan,

2000; Miars, 2017). In recognition of professional advising research advancement the

National Academic Advising Association (2017b), has awarded an Advising Technology

Innovation Award, involving creative electronic tools "used to support and enhance

advising," (p. 1), since 1999. Moreover, NACADA created a Global Awards Program to

reward outstanding advising throughout higher education (National Academic Advising

Association, 2017c).

Web-based advising evaluation tools are another multi-layered, value-added means of accountability when supported by HEI administration. It is important to acknowledge that technology does not replace, but rather compliments, the benefits obtained from in-person advising exchanges (Feghali et al., 2011; Klebe Trevino, Daft, & Lengel, 1990; O'Connor, 2016). Successful, thoughtful, and collaboratively designed web-based advising evaluation tools assist higher education stakeholders in planning, implementing, evaluating and improving advising assessment practices, resources, and informed pathways toward student and institutional success. These tools also reinforce an advising culture of evidence in a diverse and more technological real-time world while constructing student and institutional agility.

Program Evaluation/Action Research

Program evaluation, the reflective process of being put under the proverbial "microscope," is a mechanism for providing a composite view of program effectiveness in order to learn what is working and what is not working thus culminating in improvements based on a thorough inquiry (Newcomer, Hatry, & Wholey, 2015; Royse, Thyer, & Padgett, 2016; Temple, 2005). Although the terms assessment and evaluation are often used synonymously, they are distinctly different; within higher education assessment is aligned with student learning and evaluation is aligned with program improvements (Patil & Gray, 2009; Ramzan & Mallet, 2015; Scriven, 1991; Suskie, 2009). Effective program evaluation and action research, crucial inquiry elements of an advising culture of evidence, deduce best practices, patterns, gaps, and trends that inform

stakeholders of program practices and potential improvements (Banta et al., 2014; Mertens & Wilson, 2012; Newcomer et al., 2015; Royse et al., 2016).

Advising action research encompasses, as Aiken-Wisniewski et al. (2010) suggested, "systematic investigation of phenomena within ... advising or the study of a particular adviser or advising practice on student or adviser outcomes" (p. 7). Furthermore, action research will "directly influence advising behaviors, procedures, and policies" (He & Hutson, 2017, p. 73). Similarities between program evaluation and action research, initially associated with curriculum review, include being an iterative exercise investigating the nature of the advising program in "its" environment, collecting and analyzing advising data, and being a reflective and solution-oriented activity resulting in conclusions about the effectiveness, efficiency, and impact of an advising program, in addition to submitting recommendations for improvements to stakeholders (Creswell, 2012; Rademaker, 2015; Troxel, 2008).

To advance evaluation credibility, organizations like the European Association for Quality Assurance in Higher Education (ENQA), and the Joint Committee on Standards for Educational Evaluation (JCSEE) established industry evaluation standards allowing HEIs across the globe the ability to incorporate chosen standards into their program evaluation processes (American Evaluation Association, n.d.; Gibbs, De Vries, Beccari, & Raijmakers, 2017). Over time, the merits of program evaluation have been recognized and valued by HEI stakeholders; however, the practice of program evaluation, according to Mathison (2005), "is not institutionalized in the same way around the world, but … like many commodities, is traded worldwide" as evident in global HEI rankings highlighting "best in" categories (p. xxxiii).

The nucleus of program evaluation and action research is quality assurance and accountability. These are not competing criteria; however, both are current challenges facing HEIs worldwide (Deming & Figlio, 2016; Ferreira, Vidal, & Vieira, 2014; Kinser, 2014; Orsingher, 2006; Shin & Harman, 2013). Some agencies created specifically to address higher education quality and accountability include: the Quality Assurance Agency for Higher Education (QAA), the European Quality Assurance Agency (EQAA), the European Association for Quality Assurance in Higher Education (ENQA), and the Council for Higher Education Accreditation (CHEA), to name a few. Increased stakeholder demand for transparency and proof of quality and accountability in higher education make thoughtful planning of the evaluation process of advising assessment practices very important, and as Spaulding (2014) stressed, when involving HEI stakeholders in the design of a program evaluation process, "objectives are aligned with the many aspects of a program and not just the program's desired end outcomes or results" (p. 60). Once the evaluation guidelines of advising assessment practices are agreed upon and clearly communicated to all stakeholders, they need to be "painstakingly followed" (Kramer, 1982, p. 36).

Literature is deficient of published national or international investigations, as postulated by Jordan (2015) concerning "comprehensive" advising assessment program evaluation research (p. 87). A rudimentary advisement program evaluation study conducted in 2006 at Indiana State University, with a 72% adviser response rate, disclosed that the majority of advisers found the institute advisement system to be moderately effective, that adviser training was insufficient, and that the student information system was complex. The study contained improvement recommendations

such as creating an advisement handbook, having resource material accessible online, partnering with career service colleagues, and forming a centralized advising center. Unfortunately, the basic study failed to disclose details regarding evaluation planning, evaluation partners, whether the advisement program evaluation practice would be performed over time (annually), how the research data was communicated, or improvements implemented (Indiana State University, 2006).

Although not specifically an advising assessment program evaluation or action research exercise, in 2013 Illinois State University participated in a funded Foundations of Excellence (FoE) self-study evaluation for their established first-year and transfer student programs. The study acknowledged utilizing input from co-curricular partners such as advising, a noted program-guiding principle to achieve more exhaustive results (Foundations of Excellence (FoE), 2013). Likewise, a 2016 first-year program evaluation study focused on transition experiences for international students attending Scottish universities that also recognized international student advising as a co-curricular partner; and highlighted the importance of gathering and assembling support services qualitative and quantitative evaluation data to impact policy more holistically for students (Bell, 2016).

It is important not to be intimidated by the evaluation lens of advising assessment practices, but rather, "to begin to treat your own practice as your crucible for learning" (Fullan, 2011, p. 150). It is apparent that there are as many approaches to advising assessment practices as there are universities, "each with its own purposes and goals" making evaluation a valuable component of an advising culture of evidence (Banta et al., 2002, p. 5). Whether designed and performed in-house or as an acquired service through

lucrative national and international HEI consortia such as: i-graduate's International Student Barometer (ISB), Ruffalo Noel Levitz (RNL), and National Survey of Student Engagement (NSSE) that assist members with student success benchmarking tools created for program evaluation from the student's perspective, comprehensive evaluation of advising assessment practices and research becomes a learning experience that can lead to achieving and maintaining accreditation and a competitive advantage. A thorough evaluation of advising assessment practices discloses, as Srebnik (1988) alleged, "effective advising components and methods" that lead to a clear comprehension of "how advising contributes to positive student development and can begin to build an improved advising program" (p. 60).

Institutional Accreditation

The quality assurance and accountability movements are two contributing elements within the higher education domain that created pressure to provide evidence of higher education's value to internal and external stakeholders (Ewell & CHEA, 2001; Schwarz & Westerheijden, 2007; Shay, 2008). Moreover, due to the increase in the quantity of tertiary campuses worldwide, particularly since the end of the second World War, giving students a multitude of choices and creating increased enrollment competition along with controversial HEI rankings from sources such as the U.S. News & World Report and the European U-Multirank, accreditation and quality assurance are distinctions that differentiate HEIs across the globe that successfully and consistently maintain benchmark standards that inherently address quality, accountability, and improvements (European Centre for the Development of Vocational Training (Cedefop),

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2009; Marginson, 2006). The burden of proof, often hinging on the ability to gain governmental funding in some form has instated a call, according to Hernes, Martin, and IIEP (2008), for "a common qualification structure as well as comparable systems for external quality assurance (EQA). Cross-border providers of education are entering the field in many countries and, at the same time, an international market of accreditation services" (p. 15), is materializing to examine more homogenized learning in developed and emerging countries (Daniel, 2016; Nobarian & Abdi, 2007; Schmitt, 2013). External quality assurance bodies are comprised of governmental and quasi-governmental administrators that, according to Portnoi and Bagley (2015), "regulate the higher education sector … in many countries", however amid different "aims and goals" based on national needs (para. 11, Hendel & Lewis, 2005; Schwarz & Westerheijden, 2007, p. 6).

Mobile students have a responsibility to learn about, and understand, the investment and value of tertiary academic and career prospects within the host country; to trust institutional quality controls and avoid unknown quality threats (Gürüz, 2011; Hernes et al., 2008; Meda & Monnapula-Mapesela, 2016). In 2002, as Jezierska (2009) posited, the Quality Assurance Agency (QAA) issued the U.K. Code of Practice, that:

> supports the national arrangements within the UK for quality assurance in higher education. It identifies a comprehensive series of system-wide principles (precepts) covering matters relating to the management of academic quality and standards in higher education. It provides an authoritative reference point for institutions as they consciously, actively and systematically assures the academic quality and standards of their programs, awards and qualifications. (p. 200)

The utilization, according to the European Commission (2018), of "tools such as the European Credit Transfer and Accumulation System (ECTS), the Diploma Supplement, and the European Quality Assurance Register" (p. 3), will not only facilitate

recognition, mobility and assurances but also foster mutual trust. In addition, the Bologna

Process, "the platform for a thorough reform of higher education on the Continent," was

implemented to produce consistency and quality and build trust and a positive

atmosphere for learning mobility (Gaston, 2014, p. 53). Established in 1996, the CHEA, a

U.S. organization "focused exclusively on higher education accreditation and quality

education", instituted six recognition standards: "(a) advance academic [and career]

progress, (b) demonstrate accountability, (c) encourage self-scrutiny and planning for

improvements, (d) employ appropriate and fair procedures in decision making, (e)

demonstrate on-going review of accreditation practice and (f) possess sufficient

resources" that address quality assurance impacting a student population that has become

more diverse (Council for Higher Education Accreditation, 2016, p. 6; 2019, p. 1). The

U.S. Department of Education, according to the U.S. Network for Education Information

(2007), describes the regional and national associations that conduct accreditation in the

United States as being comprised of private or semi-private entities and actual academic

subject specialists that determine and impose membership standards and benchmarks

involved in performing the accreditation process to strengthen academic quality.

Critics have put a spotlight on accreditation shortcomings for more than ten years

(Lederman, 2015). The deficiencies of accreditation "in responding to accelerating

change remain formidable ones" (Gaston, 2014, p. 53). Four precipitated changes involve

(a) changes in the environment for higher education: demographic, political, and

economic, (b) changes in higher education itself: significant enrollment growth

proliferation of institutional types and delivering and confirming learning, (c) issues that

originate with critics of accreditation, both within and outside of the academy, and (d)

issues that accrediting association leaders and volunteers have identified and addressed (Gaston, 2014, p. 50). An American Enterprise Institute education policy research analyst, Preston Cooper, argued that the focus of institute financial characteristics instead of student outcomes is partially due to the fact that financial metrics are more objective and easier to measure than student outcomes, and therefore, accreditation is incentivized incorrectly (Cooper, 2016). Furthermore, Pfizer Limited's director of medical and regulatory affairs in Mumbai, Chandrashekhar Potkar (2014) suggested that accreditation is "not a quick fix" and must be part of a "long-term strategy" (p. 2). The director maintained that regulatory responsibility must remain for the purposes of "identifying, investigating and sanctioning violations"; however, he asserted that accreditation is one key element in "designing … a strong foundation of public trust" (Potkar, 2014, p. 2).

Although accreditation centers on student academic quality and outcomes, it is well established that learning occurs beyond the classroom. Learning experiences beyond the classroom, as posited by Ewell and CHEA (2001) are relevant and valuable; experiences such as "employment and increased career mobility, enhanced incomes and lifestyles, the opportunity to enroll for additional education, or simply a more fulfilled and reflective life" (p. 5). The quality, accountability, and financial focus of HEI accreditation on a continual basis endorses the need for advisers to be familiar with accreditation and any accreditation issues, to knowledgably direct existing and strategic planning efforts towards student learning, and to understand the effect advising practices have on student learning outcomes (Grites, Gordon, & Habley, 2008).

Improvement

Improvement (application of findings), the fourth element of Banta's (n.d.)

culture of evidence as it pertains to advising assessment practices, entails an examination

of elements such as reporting of advising assessment practices to internal constituents,

demonstrating advising accountability to external stakeholders, proposing improvement

initiatives for advising assessment practices based on assessment findings and improving

assessment methods.

Reporting to Internal Constituents

The uses of learning outcomes assessment have shifted beyond external

accreditation and accountability to uses for internal quality and improvements within

HEIs as a direct result of "undue concentration on external scrutiny" (Liu, 2017; Mulgan,

2000, p. 558). Internal reporting within HEIs leads to "efficient and effective

management" of improvements involving advising assessment practices (Brown, 2012;

Hughey & Hughey, 2009; Kostić & Lutilsky, 2017, p. 75).

Quality advising assessment practices provide the foundation for and enables

informative and meaningful reporting of advising SLOs and delivers an "understanding

necessary for improvement" (Ridden & Heldsinger, 2014; Wise & Hatfield, 2016;

Young-Jones et al., 2013, p. 14). Effective measurement and reporting, according to

Hendel and Lewis (2005), is "critical to the success of any system of higher education"

(p. 251). Internal constituents within higher education are defined as, according to

Jongbloed, Enders, and Salerno (2008), "a community of scholars" (p. 305), and

consisting of, as posited by Ferrero-Ferrero, Fernández-Izquierdo, Muñoz-Torres, and

Bellés-Colomer (2018), "HEIs students … [and] academic staff" (p. 317), that assist with all HEI's daily operations. Internal constituent "endorsement and participation are essential" for the implementation, use, and measurement of advising SLOs to be realized, as they are the foot soldiers, the implementers that are effecting change and improvement (Liu, 2017, p. 37). An institutional culture that engages and values internal constituents, as suggested by Khan and Matlay (2009), "can help achieve a motivated workforce, loyalty, high performance, innovation and a distinctive institutional competitive advantage" (p. 769).

Questioning the role of reporting advising assessment practices to internal constituents early in the process is an important exercise. The answers will guide the reporting design. Reporting of advising assessment practices information to internal constituents needs to be reflective and is further enriched when practitioners: predetermine relevant SLO analyses, provide useful measurement comparisons, and promote dialogue among internal constituents ahead of the release of any final reporting of advising assessment information (Palomba & Banta, 1999).

Reporting advising assessment practices and advising SLOs data provides a feedback loop and evidence "that there is a clear understanding of the information by … the audience and provides accountability for both the accuracy of the information and, in some cases, the action that it precipitates" (Ridden & Heldsinger, 2014, p. 90). Precipitated advising actions are typically aimed at student learning improvements, professional development, and cultural transformations. A goal derived from the reporting of advising assessment practices is establishing reporting standards. Reporting standards are effective when they assist the internal audience with comparing cumulative

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advising SLO assessment data over a continuum of time (Kim, Huang, & Emery, 2016; Zumsteg, Cooper, & Noon, 2012). Established reporting standards of advising assessment practices, inclusive of key metrics, inputs, and outcomes can be "critically flawed" or absent at universities (Niven, 2006, p. xii; Schmitt, 2013).

Constituent reporting research conducted by Pike and Rocconi (2012) highlighted four adaptable principles for achieving effective, robust, and credible internal advising assessment practices reporting: (a) it needs to be non-technical and supported by past advising research and practices, (b) include concrete advising examples, (c) incorporate visual tools like charts and graphs, and (d) utilize information for predictive advising student learning patterns. To obtain desired results from internal constituent decision-makers, advising assessment practices reporting needs to indicate "what types of understanding and action they are seeking … and then communicate results" accordingly (Campbell, 2005; Pike & Rocconi, 2012, p. 122; Suskie, 2009).

An internal constituent reporting mechanism adopted from business that appears to not be broadly utilized nationally or internationally in the advising realm of higher education is the balanced scorecard (Brown, 2012; Taylor & Baines, 2012). Created by Drs. Kaplan and Norton, the scorecard was introduced in 1992 as an adjustable framework for measuring organizational performance using specified metrics, as posited by Chen, Ching-Chow, and Jiun-Yan S. (2006), to establish within higher education, "educational objectives and standards" (p. 191). Integrating an advising balanced scorecard as one strategic communication tool can underscore the effect of advising on student learning to internal constituents by defining multiple measures of outcomes that allow "users to be objective and subjective, process-and outcome-focused, and forward-

and backward-looking," offering constituents "multiple points of views" to enhance, improve, and advance as a learning institution (Hladchenko, 2015; Hurt, 2004, pp. 124, 125). It is an instrument used to evaluate the value of advising on student learning, not to evaluate individual adviser performance (Hurt, 2004). Moreover, the scorecard can translate advising assessment practice strategies, according to Kettunen (2004), "that can be communicated and acted upon throughout the organization" (p. 359).

Benefits of this summative and formative improvement method are numerous and include increased communications among internal constituents around advising effectiveness, conveying advising student learning outcome results and effectiveness to new internal constituents, improving the advising culture, and encouraging advisers to be proactive versus reactive regarding student learning (Hurt, 2004). Additional advising balanced scorecard benefits can entail determining priorities of future advising planning and needs assessment, providing a structure for on-going advising SLO improvements, evaluating advising resource efficiencies, and documenting the contribution of advising towards the mission of HEIs' promoting advising excellence (Al-Hosaini & Sofian, 2015; Brown, 2012). Furthermore, this advising internal constituent reporting approach would establish "a culture of evidence emphasizing data based performance discussions and decision-making" and is iterative in nature (Lyddon & McComb, 2008, p. 169).

However, as Taylor and Baines (2012) cautioned in their research of four U.K. universities' using the balanced scorecard for performance management, that it is crucial to avoid becoming a "measurement industry" where the "data collection and presentation work becomes disproportionate to the task of assessing whether a strategy is being achieved or otherwise" (p. 121). Incorporating a well-designed and consistently examined

advising assessment practices balanced scorecard "actually improves the ability of the top leaders to make good decisions. It helps the leaders and others throughout the organization align their actions with the overall strategic direction" (Brown, 2012; Eftimov, Trpeski, Gockov, & Vasileva, 2016; Lyddon & McComb, 2008, p. 163). In addition, implementing an agreed upon communication tool(s) in an iterative and consistent manner for reporting to internal constituents about advising assessment practices creates a culture of continuous improvement impacting institutional and student success.

Demonstrating Accountability to
External Stakeholders

Accountability to external stakeholders is a concept newer to European HEIs. U.S. HEIs were originally accountable to an external board of overseers, while European public HEIs "were self-governed" by faculty guilds, students, and occasionally national ministries (Peirce, 1833; Powers & Henderson, 2016, p. 11; Zumeta, 2011). Demonstrating accountability and quality to external stakeholders has gradually changed nationally and internationally with fluctuations in enrollments, tuition and fees, and government investment and involvement in HEIs, including the recent formation of: the U.K. Office for Students (OfS), and the U.S. Department of Education's (DoE) establishment of the Office of Postsecondary Education (OPE). Persistent external stakeholder involvement and increased pressure to demonstrate students' learning "has conditioned most institutions to focus on reporting student achievement through numbers," reporting that has increased in "volume, quantity, and complexity" (Maki,

2010, p. 124; Powers & Henderson, 2016, p. 7; Quality Assurance Agency for Higher Education, 2018; Tiyambe Zeleza, 2016).

While studying the shifts of accountability in HEIs, Hooge and Wilkoszewski (2012) addressed two forms of accountability:

> Vertical accountability is top-down and hierarchical. It enforces compliance with laws and regulation and/or holds schools accountable for the quality of education they provide. Horizontal accountability presupposes nonhierarchical relationships. It is directed at how schools and teachers conduct their profession and/or at how schools and teachers provide multiple stakeholders with insight into their educational processes, decision making, implementation, and results. (p. 8)

The 1999 Bologna Process was established in part to corroborate to external stakeholders the "comparability in the standards and quality of higher-education qualifications" (Università di Bologna, 2018, para. 2). U.S. HEI accreditation endures as the principal method of demonstrating to external stakeholders "how well higher education serves students and society" and assures them of "the worth of an institution or program" (Eaton, 2011, pp. 3, 4). Achieving national and international accreditation and quality assurance distinctions continue as the most customary ways to demonstrate accountability and educational quality to external stakeholders. However, HEI's quality and accountability are being challenged as never before in the United States and across geographical boundaries.

Accountability pressures from external stakeholders such as parents, governments, state agencies, governing boards, public and private entities, alumni, industry, and accreditation organizations are being highlighted in the media (Asiyai, 2015; Banta et al., 2009; Bokova, 2017; Cortese, 2003; Ruben, 2001; Sliwka & Istance, 2006; Suskie, 2009). Headlines that are hard to dismiss include The Daily Telegraph's 2017 "Universities Must Embrace Accountability or Lose Public Confidence" and

"Universities Must Embrace Accountability; Higher Education Providers Need to Show Their Critics That They Offer Excellent Value for Money," The Guardian's 2012 "Universities Must Be Accountable, Yes, But To Whom," Forbes' 2015 "A Discussion on Higher Education Accountability," the Washington Post's 2012 "College Accountability: A Closer Look," and USA Today's 2013 "Demand Accountability from Universities—and Borrowers."

Universities are "duty" bound to be accountable and transparent to constituents (Suskie & Ikenberry, 2015, p. 57; Zumeta, 2011). All advising stakeholders must not only endorse, but "collectively take responsibility" for advising student learning outcomes, exposing this duty for accountability and successfully implement improvements despite the level of leadership involvement (Fullan, 2011, p. 39; Suskie, 2009). Advising accountability involves frequent, iterative examinations of advising's "progress toward its' [student learning] goals so it can ensure that it will achieve those goals—arrive at its destinations—safely and on time or so it can make [advising] adjustments if warranted", allowing for more thorough demonstrations of accountability to external stakeholders (Suskie & Ikenberry, 2015, p. 147).

Retention, graduation, and employment statistics are often linked with HEIs advising accountability. However, student satisfaction opinion surveys are another popular tool for demonstrating advising accountability to external stakeholders. Several student perspective surveys include: the U.S. Ruffalo Noel Levitz (RNL), the National Survey of Student Engagement (NSSE), the U.K. Engagement Survey (UKES), and the U.K. Graduate Career Survey. Professional organizations such as NACADA, comprised of global advising professionals from the United States, Canada, Puerto Rico, and

numerous international countries; and the U.K. Register of Career Development

Professionals, comprised of career guidance professionals from England, Northern

Ireland, Scotland, Wales and public, private, and voluntary sectors that support advising

research and reporting with grants and awards are likewise tools for advising

accountability to external stakeholders (Career Development Institute, 2013; National

Academic Advising Association, 2017a).

Proven and reproducible advising standards, competencies, and guidelines are

additional forms of accountability demonstration to external stakeholders. The 2012

Canadian Guidelines for Career Development Practitioners (S & G), touted as an

international model, includes fundamental competencies, specific areas of specialization,

and a code of ethics with one goal of providing quality assurance to the public (Canadian

Council for Career Development, 2012). Established in 1999, the International

Association for Educational and Vocational Guidance (2003), maintains a core

competency of demonstrating "appropriate ethical behavior and professional conduct in

the fulfillment of roles and responsibilities" (p. 1), as one of many elements that inform

practitioners. Launched in the 1980s, the Council for the Advancement of Standards in

Higher Education (CAS) (2018), developed over 45 sets of standards and guidelines

focused on areas of the college student experience that include advising services; part of

their mission is to "interpret and use assessment results to demonstrate accountability" (p.

14). Formed in the late 1970's the NACADA's seven core values provide professional

guidance and the integrity component highlights "accountability to the student,

institution, and the advising profession" (National Academic Advising Association,

2017d). The Gatsby Foundation funded career guidance research resulting in eight

defined benchmarks in the Good Career Guidance report; highlighted in one of the recommendations is accountability through the use of school inspections and performance tables by the U.K.s Office for Standards in Education (Oftsted) (Sainsbury, 2014).

Possible challenges HEIs face in demonstrating advising accountability include colleagues' inability to agree on key advising objectives, ambiguous advising goals, and preferences outlined by constituents of different timelines for advising SLO data (Frederick, 2012; Suskie, 2009). Addressing challenges directly permits an accountability path forward that includes reliable processes and outcomes.

Credible evidence of advising assessment practices influences an institution's reputation. Reliable advising assessment practices are built when advisers consistently demonstrate that assessment results were utilized to inform improvements in advising teaching, advising processes, student learning and any future advising assessment planning (Suskie, 2009). An institution's reputation, of which advising is an integral function, is partially formed by consistently implementing, as theorized by Suskie and Ikenberry (2015) "resources in ways that meet stakeholder needs, serve the public good, achieve its purpose and goals, and ensure and demonstrate its quality and effectiveness" (p. 64), with the objective of on-going improvement impacting student success.

Proposing Improvement Initiatives
Based on Assessment

A proposal, as defined by Frey (2001), is "the tangible result of knowledge-building processes, supported in turn by hard and directed work and buoyed by a positive collective attitude within … [the] proposal team of knowledge workers" and is not

comprehensive unless intangible principles such as "problem-solving acumen, integrity, fiscal stability, risk mitigation" (p. 50), are also incorporated. Advising assessment practices data are an important driver of strategic advising improvements within HEIs that assist in understanding "the balance between school, student and contextual data" and guides the institution with informed implementation of "processes that appear to support improved achievements" (Campbell & Levin, 2009, p. 51). A comparative study of British (QAA) and French (CNE) higher education evaluation agencies found their organization's original focus was to "aid on-going processes of institutional improvement", not accountability (Dodds, 2005, pp. 155, 164). Moreover, improvement is no longer solely about improving educational quality that cultivates student success in and beyond tertiary education, it has become a more holistic element in institutional competitiveness and endurance.

As learning institutions, what is required now is not just improvement—iterative, continuous or otherwise, but rather bold, insightful, applicable and sustainable innovations that create HEIs that are sometimes revered, studied, and eventually imitated in some fashion by competitors (Sower & Fair, 2012). The implementation of assessment initiatives has elevated accountability and improvement processes prominently within HEI's inventory of priorities because of its propensity to inform practice and resource priorities. Assessment for continuous improvement is a formative and evolving process "needed to be brought to the forefront of the conversations" among stakeholders (Davis, Kumtepe, & Aydeniz, 2007, p. 127; Emil, 2011). An established organizational learning environment, as asserted by Banta et al. (2009), "accelerates improvement" (p. 272). Having proposals that act as a blueprint, as surmised by Laurillard (2002) "for an

organisational infrastructure capable of continual improvement is essential for innovation in learning and teaching" (p. 240). Assertions such as "that is how it has always been done," "rest on our laurels," and "maintain the status quo" have become very detrimental to HEIs and improvement initiatives.

Educational improvement research performed in 2009 of Ontario Canada school systems highlighted practical criteria easily adaptable for constructing advising assessment practices improvement initiative proposals that would emphasize the following: setting specific and clear improvement targets for advising assessment practices, creating improvement plans and deadlines for advising assessment practices, instituting teams focused on advising assessment practices, and improving adviser's teaching skills "to balance ambition with realism" (Campbell & Levin, 2009, p. 57; Liu, 2017). An established advisement center at a 4-year public university, as investigated by Smith, Szelest, and Downey (2004), grasped these proposal criteria in the advancement of their advising assessment practices for at-risk students. The staff set specific learning objective goals tied to the institutional mission, created a plan for the retention team members, formed a retention team and utilized data from multiple assessment tools to inform improvements, and judged that they "closed the feedback loop between outcome and process by employing reflective administrative practices" (p. 425), delineated in the study as surveys, focus groups, report and practice. A study performed by the Institute for Public Policy Research (2013) emphasized, the need for a shift of thinking from "a higher education sector" to "a higher education system" and proposed an initiative to widen participation for talented disadvantaged youth at King's College London medical degree program. The improvements included an extension of the program by an additional year,

increased financial support to first year students; that all medical students participate in the same rigorous final assessments upon degree completion with the objective to impact learning and teaching for the benefit of the community (Institute for Public Policy Research, 2013, p. 111).

For better or worse, HEIs in the U.S. and abroad have proposed and implemented business excellence frameworks modified to "fit" their practices, often with combative concern of incompatibility, unsustainability and gradual "corporatizing" of higher education (Kniola, 2013; Ntim, Soobaroyen, & Broad, 2017). Two adaptable business frameworks for higher education advising assessment practices include strengths-based leadership and continuous quality improvement (CQI). Gallup Poll research performed by two international leadership experts—Barry Conchie, a former U.K. public sector leader and Tom Rath, an international bestselling author—revealed effective strengths-based leadership traits that command increased success based on an understanding of not only their own, but their employee's needs and talents. Initiating strengths-based approaches in advising assessment practices shifts the attention from challenges to opportunities, as Schreiner and Anderson (2005) discovered, built on student empowerment, talents, and successes where the adviser "explicitly attempt[s] to promote excellence in the student" (p. 21), with their expertise (Grites et al., 2016). Due to the importance of the adviser/advisee relationship, as hypothesized by Soria, Laumer, Morrow, and Marttinen (2017), advisers who utilize a strengths-based approach "may be advantageously poised to create the most positive impact on students' outcomes" (p. 56), and successes (Jones-Smith, 2011).

Continuous quality improvement is a direct result of Deming's venerable Total Quality Management (TQM) framework but is often used, in error, synonymously with TQM; continuous quality improvement stresses obtaining new knowledge driven by learning that is reinforced by theory (Bhuiyan & Baghel, 2005; The Deming Institute, 2018; Tukey, 1996). Schools and other educational systems, as theorized by Sallis (2002), "need to be as concerned with continuous improvement as any other organization" (p. 51). A 2012 Albanian HEI study proposed a positive correlation between CQI use, accreditation, and Bologna Process standards to institutional success and likewise found that a change to one of the correlates had a substantial impact on the remaining two (Qefalia & Totoni, 2012, p. 267). A 2006 study of nine Hong Kong tertiary educational and career preparation campuses found that the idea of continuous improvement is often recognized by institutions as "self-assessment or self-improvement" (Chan Lai-chuen, 2006, p. 25). A CQI advising initiative, as proposed by Higginson, Trainor, and Susan C. Youtz (1994), introduced measurement, empowerment, teamwork, and advisee focus (META) as principles exercised in transforming advising "through outcomes assessment" (p. 137). The authors also provided their readers with scenarios and possible outcomes for each META principle, and concluded that META was something advisers could implement easily and without upper administration's guidance.

The esteemed European Foundation for Quality Management and the Baldridge Excellence Framework (Education) organizations include strengths-based and CQI-inspired criteria such as the talent of people and continual (results oriented) improvements (EFQM, 2017; National Institute of Standards and Technology, 2013).

Process improvement is continuous and dependent on all stakeholders within advising, and "advisers must monitor the assessment process itself to ensure that it is as responsive as possible to changing needs and circumstances" (Banta et al., 2002, p. 12), remaining agile while impacting student success in and beyond their tertiary education. Furthermore, it is incumbent upon advisers "to be ready to offer their programs, services and experiences in an environment that is marked by continuous change at an increasingly faster pace" (Schuh, Jones, & Torres, 2017, p. 562). Most importantly, in regards to continuous improvements and increased efficiencies of advising assessment practices, as endorsed by Soni, Kosicek, and Sandbothe (2014), is that the "march toward finding a better way of doing things cannot stop" (p. 109).

Improving Assessment Methods

Trusted evidence of student learning obtained over time and through multiple methods provides fueled confidence of advising assessment practices for engaged stakeholders and decision makers (Aiken-Wisniewski et al., 2010; Carless, 2009; European Centre for the Development of Vocational Training (Cedefop), 2009). Research inherently improves practice and is vital to detecting "new advising methods and to improve present methods" for advising assessment (Beatty, 2009, p. 71; Creswell, 2012). Assessment instruments are not, as acknowledged by Banta et al. (2002), "perfectly reliable or valid, so they must be improved as warranted" (p. 11; Crook & Dymott, 2006). Furthermore, advisers "may find that even the improvements based on assessment findings create a need for new assessment components" (Banta et al., 2002, p. 12).

Although slow to adopt in higher education, according to Timmis, Broadfoot, Sutherland, and Oldfield (2016) "the advent of interactive technologies … offers significant opportunities for more engaging … new forms of assessment" (p. 455). These four experts, hailing from Bristol University's School of Education in the United Kingdom, focused on technology-enhanced assessment (TEA) in their comparative education research identifying digital technology's impact through "seven areas of opportunities" to improve assessment methods through innovative measures. Although not yet incorporated into assessment methods of advising practices in higher education, these seven areas of opportunities could be technologically incorporated into such methodologies to improve student learning in the following innovative ways: "new forms of representing knowledge and skills"—in addition to advising e-portfolios usage, integrating virtual worlds and immersive environments where students outline and solve authentic advising student learning, goals, experiences and problems (Timmis et al., 2016, p. 459). This can be advantageous in assisting students in understanding: (a) they are not the only ones experiencing higher education adjustment issues; apprenticeship goals and concerns; and knowing when, how, and whom to ask for help; (b) crowd sourcing and decision-making opportunities that could include the use of electronic voting systems for preferences of advising assessment methodologies or approaches addressing student educational and career needs, which tend to differ throughout an advisee's higher education journey and would provide more immediate feedback, potentially impacting decisions each advisee makes; (c) increasing flexibility due to adviser/advisee's comfort with technology, thus allowing advising assessment practices greater integration in the culture due to less dependence on physical location and less

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sensitivity to time with the use of mobile devices, software applications, web portals, and real-time responses; (d) supporting and enhancing collaboration by utilizing both synchronous and asynchronous technologies like advising webinars and share drives, allowing peer-to-peer data collection and sharing of advising assessment practices and real-time updating/revisions of assessment methods incorporated into advising practices; (e) assessing complex problem-solving skills by incorporating advising approaches, as described earlier, of virtual, immersive environments and crowd sourcing that exercise and assess student's cognitive skills such as "hypothesis-testing, role-playing, and problem-solving" (Timmis et al., 2016, p. 461), of advising specific scenarios by utilizing technology to progress advising methods beyond "online versions of print resources" (Steele & Thurmond, 2009, p. 85; Timmis et al., 2016, pp. 459-461); (f) innovation in recording achievement by incorporating a fairly new method used in gaming and with massive open online courses (MOOCs) that substantiates specified knowledge and skills in the establishment of an advising learning community where the members would determine the awarding of an advising "virtual badge" to a student once they have proven mastery of specified skills and knowledge to the community members. These virtual badges provide "visual symbols of accomplishments packed with verifiable data and evidence that can be shared across the web … Badges empower individuals to take their learning with them, wherever they go, building a rich picture of their lifelong learning journey" (Mozilla Foundation, 2016, para. 1); and (g) exploiting learning analytics locally and nationally by including an advising dashboard that would integrate and augment large and complex data sets for measures such as advising student satisfaction, at-risk students, on-time graduation, and achievement of SLOs to proactively "suggest

adaptations, improvements and recommendations for learners, teachers and institutions as a whole" (Timmis et al., 2016, pp. 459-463).

Improved efforts involving advising assessment practices that demonstrate and assess student learning achievement in perhaps non-traditional ways should have HEIs heed the Council for Higher Education Accreditation warning against:

> narrow definitions of student learning or excessively standardized measures of student achievement. Collegiate learning is complex, and the evidence used to investigate it must be similarly authentic and contextual. But to pass the test of public credibility … the evidence of student learning outcomes … must be rigorous, reliable, and understandable. (Council for Higher Education Accreditation, 2003, p. 6)

Higher education institutions may be slow to adapt to technology's power to assist in improving methods involving advising assessment practices, however, there is no denying technology's ability to assist engaged stakeholders of its power beyond efficiency, reliability, and predictability and to embrace its' ability as a tool providing more universal responsiveness in reconsidering "the relationship between learning and assessment" and its' contributions to an improved advising culture of evidence (Timmis et al., 2016, p. 459).

Summary

This chapter highlighted the features constituting Banta (n.d.) culture of evidence applied as the conceptual framework for this co-curricular advising assessment study. Establishing an advising culture of evidence assists in avoiding assessment threats of inconsistent execution, utilization of unsophisticated measures and the advancement of second-rate decisions. An advising culture of evidence originates and is sustained by an on-going cycle of "planning (assessable outcomes), implementation (instrumentation), evaluation (data collection and analysis), and improvement (application of findings)" of

advising practices (Maki, 2010, p. 292). Each aspect informs the next and causes a circular exercise that produces a valuable feedback loop, thereby procuring assessment credibility.

Planning an advising assessment culture must include details such as resource considerations, the creation of institutionally aligned advising mission, vision and goals, developing advising programming based on identified and assessable advising learning outcomes and goals, and establishing an effective community reporting plan regarding advising practices chronicling constructive and non-constructive assessment results. The implementation phase of an advising assessment culture would be deemed successful once initiatives become actionable objectives and defined learning outcomes are measured utilizing multiple instruments in conducting assessment by engaging all advising stakeholders. Evaluation, the comprehensive examination of advising practices, is most beneficial to the student, adviser and institution when both formative and summative evaluation is performed. Once evaluation is complete it is essential that the analyzed data are employed to communicate the quality of student learning and accountability to the community and cultivates continuous advising improvements contributing to student success. Improvements are most advantageous within a learning organization, such as higher education institutions, when they are continuous, strategic, clearly communicated, and supported by technology. Successful advising improvements are dependent on, and inclusive of, all advising stakeholders responsive to advising needs and changes and should emerge as characteristically agile within an intensely real-time and fast-paced world.

No matter where students choose to enroll, an advising culture of evidence (plan: identify SLOs; implement and evaluate: methods to conduct assessment, and improvement: data use) would consistently quantify and explain the effect of advising on student learning to all stakeholders; thereby substantiating the commitment by many tertiary institutions (HEIs) across the globe to each student's success in and beyond their tertiary education.

CHAPTER 3

METHODOLOGY

Introduction

This chapter outlines the methodology used to gain a perspective of the advising

assessment practices of one accredited urban career-focused HEI in the United Kingdom.

Research Questions

The survey research questions were investigated utilizing quantitative descriptive

analyses:

1. What are the advising student learning outcomes identified at the participating

U.K. university?

2. What are the advising methods utilized to conduct assessment of advising

SLOs at the participating U.K. university?

3. How are the advising assessment data used for advising co-curricular

improvement(s) at the participating U.K. university?

4. What elements are viewed as supporting the assessment of advising at the

participating U.K. university?

Research Design

This quantitative, descriptive study utilized a non-experimental survey design.

Survey research, according to Muijs (2004) is "well suited to descriptive studies, or

where researchers want to look at relationships between variables occurring in particular real-life contexts" (p. 36). Survey research depicts "the attitudes, opinions, behaviors, or characteristics of the population" and the data used "to describe trends about responses to questions and to test research questions or hypotheses" and to connect "results of the statistical test back to past research studies" (Creswell, 2012, p. 376). The survey for this study was administered utilizing Qualtrics software. A nonprobability sample of international higher education advising professionals was solicited to participate in the study. Gaining a cross-cultural perspective of advising assessment practices (identify SLOs, assessment methods and data use) at an accredited urban career-focused HEI in the United Kingdom, located in the European country that remains the second leading destination for mobile higher education students; was the central purpose of this study, not to generalize the results to other HEI populations.

Population

This quantitative, descriptive and non-experimental advising assessment study was performed with a targeted population of undergraduate academic and career advising professionals employed at one accredited urban polytechnic, non-profit, public, and award-winning HEI in the United Kingdom, situated in the heart of a large regional city. The university employs over 300 personnel and offers both vocational and academic education through 29 foundation, bachelor and master degrees for almost 8,000 students; comprised of 61% female, 59% male and over 30% non-native; with specialized facilities across four campuses.

Sample

The convenience sampling of 243 undergraduate academic and career advising professionals were asked to participate in this study, 99 opened the survey link and 52 actually participated in completing all or part of the survey. The survey participation request, including the survey link, was sent electronically by the university's Deputy Vice-President to advisers employed at the U.K. university (Appendix D). Utilizing non-probability convenience sampling in spite of its limitations is often the most commonly used "to recruit participants to a study" due to their accessibility or availability, in light of "real-world complexities" as "it would be daunting at best to obtain an effective sample" for many studies (Keiding & Louis, 2016, p. 331; Punch, 2013; Sedgwick, 2013, p. 2).

These "captive" participants have an absence of randomness "as much as possible", with the "basic idea … to approximate and resemble" a population fulfilling specific criteria, and not to generalize (Buelens, Burger, & van den Brakel, 2018, p. 325; Tansey, 2007, p. 765; Vehovar, Toepoel, & Steinmetz, 2016, p. 332).

Instrumentation

A lack of tertiary advising assessment survey instruments led me to request permission to use an existing National Survey on Assessment of Academic Advising created and utilized by Powers (2012) in a seminal U.S. study. The original survey targeted the NACADA professional advising members that were accountable for advising assessment (Appendix A). I was granted permission by Powers (2012) to use the vetted instrument. In researching the use of pre-existing questions, Hyman, Lamb, and Bulmer (2006) noted, that "one advantage of using … pre-existing questions is that they will have

been extensively tested at the time of first use" (p. 1). Use of existing instruments, as asserted by Brislin (1986), "designate measures which were developed and standardized in one culture and which can possibly be used for data gathering in another culture" (p. 138). However, given the complicated and evolving nature of replicated survey research these hypotheses still require instrumentation due diligence on the part of the researcher.

In addition to being budget friendly, the online web survey, as posited by Creswell (2012), is an "easy, quick form of data collection" (p. 156). Furthermore, survey research provides an opportunity to compare "groups, cultures, nations, or continents" and a "means of distinguishing between local conditions and universal regularities" (Harkness & Fons Van De Vijver, 2003, p. 3).

The modified survey (Appendix B) integrated both asserted philosophies by utilizing previously developed measures that were standardized in the U.S. and engineered for data gathering in the U.K. as a means of comparing and distinguishing between local conditions and universal regularities of advising assessment practices. Moreover, the survey provides: 1) a framework for a more diverse worldview and 2) demonstrated cross-cultural competencies. Survey research provides an opportunity to compare "groups, cultures, nations, or continents" and a "means of distinguishing between local conditions and universal regularities" (Harkness & Fons Van De Vijver, 2003, p. 3).

The survey was slightly revised based on critiques from two university experts that agreed to take the survey to capture and correct for any differences in culture and to reflect career (industrial placement) advising assessment practices due to the focus of workforce "upskilling" and the vocational curriculum of the U. K. university. The 3

recommended changes included removing the "For example" and "However" examples under the "Defining your role" section, to guide the participants to advance to the next SLO if a particular SLO isn't identified at the university (to move ahead 3 questions), and very minor grammar changes.

The revised instrument, like the original instrument, encompassed four main sections: 1) advising role and responsibility information, 2) SLO's identification, assessment methods and use of assessment data, 3) advising assessment perceptions and 4) demographic information. The opening section focused on respondents defining their advising role (i.e., academic advising associated with undergraduate programs or career advising associated with undergraduate industrial placements) and their advising situation within the institution (i.e., advising responsibilities at the university, school/division or department level). Additional items included: responsibility for advising students (yes/no), who advises undergraduate students (i.e., lecturers, professional advisers), whether advising is mandatory for students (yes/no), whether a formal mission statement exists for advising units and whether any SLOs were identified and/or assessed (yes/no).

The second section consisted of multi-level assessment practice questions for each of the twenty-six identified advising SLOs, categorized as three types of learning: cognitive, behavioral or affective (know, do, appreciate). The original SLOs were heavily influenced by National Academic Advising Association resources such as the "NACADA Guide to Assessment in Academic Advising", material from the 2012 Assessment of Academic Advising Institute, and clearinghouse properties such as "Constructing Student Learning Outcomes", NACADA designed "Academic Advising Syllabi, Assessment of Academic Advising Instruments and Resources, the Assessment of Advising Commission

resources, and Student Learning Outcomes for Academic Advising", ultimately

influencing the creation of the SLOs (Powers, 2012, p. 28). If respondents answered

"Yes" to the unit/institute identification of any of the twenty-six advising SLOs the next

level of the SLO question offered assessment method measures that were originally

adapted from the 2009 "National Institute for Learning Outcomes Assessment national

survey of provosts and chief academic officers", ultimately influencing the method(s)

choices (Powers, 2012, p. 29). The response options relating to assessment method

measures included:

> 1) We do not formally assess this student learning outcome, 2) We informally assess this student learning outcome, 3) Written exams (new student orientation, advising sessions, orientation courses), 4) Rubric to assess student work/portfolio, 5) Rubric to assess direct observation of student in advising session, 6) Rubric to assess reflective essays, 7) Surveys/questionnaires (student satisfaction survey), and 8) Other: write-in option to include any measures not listed. (Powers, 2012, p. 29)

Once methods were chosen the participants were offered the following options for

detailing the uses of assessment information:

> 1) We do not use the assessment information gathered, 2) Revise advising pedagogy, 3) Revise advising curriculum, 4) Revise student learning outcomes, 5) Revise process/delivery outcomes, 6) Evaluate individual advisors, 7) Evaluate the advising unit and services, 8) Lobby for new resources based on assessment results, 9) Fulfill assessment mandates of institution administration, and 10) Fulfill assessment mandates of institution accrediting body, and 11) Other: write-in option to include any uses not listed. (Powers, 2012, p. 30)

The third section of the survey focused on sources used to identify advising

student learning outcomes and the selections included:

> 1) Mission of the institution, 2) Needs of students on campus, 3) Identification of services provided to students, 4) Delineated advising goals based on advising mission statement, and 5) Delineated advising objectives based on advising mission statement" and 6) Other: write-in option to include any resources not listed. (Powers, 2012, p. 30)

The final section focused on factors that participants believed increased and/or improved the assessment of advising. The items, according to Powers (2012) were "adapted from the 2009 NILOA national survey of provosts and chief academic officers and the 2010 NILOA national survey of department and program heads" and included 15 choices:

> 1) Advisors need to believe that assessment of advising is a worthwhile endeavor, 2) Advisors need to know how to conduct assessment of advising, 3) Advisors need to feel confident in their abilities to properly conduct assessment of advising, 4) Advisors need to enjoy the assessment of advising process, 5) Advisors need to collect better assessment data, 6) Advisors need more information about tools and approaches for assessment of advising, 7) Advisors need better measures for assessment of advising, 8) Advisors need more time to conduct assessment of advising activities, 9) Advisors need to be rewarded for assessment of advising activities, 10) Advisors need more information about what similar institutions are doing to assess advising, 11) Administration needs to require more lecturers/support staff involvement in assessment of advising, 12) Administration needs to provide more support for the assessment of advising, 13) Administration needs to provide staff more time for assessment of advising, 14) Administration needs to use assessment information to make decisions and changes, and 15) Advisees need to be more willing to participate in assessment of advising. (pp. 31, 62)

The answers to these specific questions featured a 5-point Likert rating scale of "Very important, Important, Neutral, Unimportant," or "Very unimportant" (Powers, 2012, p. 31). Questions regarding position and length of time in position completed the survey (Table 2).

At over ninety questions the survey could be prone to errors of response rate linked to feedback fatigue (Connelly, 2011; Suskie, 2009; Wise & Barham, 2012).

Reliability and Validity

The original instrument was administered in 2012 in the U.S. with a "similar form of measure" attributing to a "consistent evaluation of the concept" regarding assessment

practices and to the reliability of the survey (Abbott & McKinney, 2013, pp. 81-82; Creswell, 2012; Punch, 2012).

The original survey developer, K. L. Powers, established validity and reliability through multiple constructs such as requesting an examination of the instrument contents by 3 advising assessment specialists that were "asked to judge the degree it measured predetermined objectives and the relative importance of the parts of the instrument," in addition to "a sample of NACADA 2011 Assessment Institute participants" that "completed and provided feedback on issues they experienced completing the survey" (Powers, 2012, p. 31). Additionally, performance of iterative factor analyses, "a construct validation technique," was utilized to determine "stable and consistent" scores within the instrument (Creswell, 2012, p. 159; Powers, 2012, p. 31).

Similarly, due to the European aspect of this study a Deputy Vice-President of the participating U.K. university assisted me with performing a usability study to capture and correct for any differences in culture.

Two invited respondents responsible for advising were asked to review the survey to assess the relevance of each survey question and section, and to determine whether the stated objectives were obtainable. Both participants provided instrument feedback. The recommended changes included: 1) removing the "For example" and "However" segments under the "Defining your role" section due to the clear definition choices provided for both academic and career advising roles, 2) to potentially reduce the length of the survey by guiding the participants in the section focused on the twenty-six provided SLOs to advance to the next SLO if a particular SLO isn't identified at the university (move ahead 3 questions), and 3) some minor grammar changes, such as

academic program to academic programme, in this exercise were implemented, furthering

evidence of the original instrument design and content validity and reliability (Abbott &

McKinney, 2013; Creswell, 2012; Punch, 2012; Rudestam & Newton, 2007).

<center>Definition of Variables</center>

Quantitative researchers, as asserted by Punch (2012), "see the world as made up

of variables, modelling what we do … in everyday life" (p. 5). A variable, according to

Creswell (2012), can be "measured and varies" in attributes (p. 113). In experimental

context, as posited by Weathington, Cunningham, and Pittenger (2012), "any element of

the experiment that can change is considered to be a variable" (p. 44). Moreover,

independent and dependent variables are commonly known as cause and effect variables

respectively (Creswell, 2012; Harrison, 2013; Punch, 2012). The independent and

dependent variables are outlined in Table 1.

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Table 1

Independent and Dependent Variables

Independent Advising Practices	Dependent Advising Learning Outcomes	
1.Identify advising SLOs	1.Student knows degree requirements	14.Student interprets degree audit report for educational planning
2.Assessment method(s)	2.Student knows program/ college policies	15.Student uses online portal for career/industrial placement planning
3.Assessment data use	3.Student knows about academic majors available	16.Student prepares questions for advising appointment
	4.Student knows about careers associated with their degree	17.Student uses online registration system, Canvas, to enroll in classes
	5.Student knows how to schedule advising appointment	18.Student accesses advising in a timely manner
	6.Student knows how to calculate GPA	19.Student appreciates how personal values relate to life goals
	7.Student knows where to locate resources on campus	20.Student values how academic major reflects personal interests
	8.Student demonstrates effective decision-making skills	21.Student values how career goals reflect personal interests
	9.Student able to develop long-term plans meet educational/career goals	22.Student values ownership of educational/career placement experiences
	10.Student uses educational plan to manage degree completion	23.Student values advising contribution: educational/career experiences
	11.Student uses career plan to manage industrial placement(s)	24.Student values role of industrial placement: undergraduate experiences
	12.Student engages with appropriate resources for academic success	25.Student values benefits of university established industry relationships
	13.Student engages appropriate resources for industrial placement success	26.Student values importance of interacting with faculty and staff

Independent Variables

The measured independent variables, influences on any study conclusions, entail whether or not the participating university: 1) identified advising SLOs, 2) employed assessment method(s), and 3) utilized advising assessment data. The following defines the variables with corresponding survey response options:

Advising SLOs: described whether any of the defined twenty-six advising SLOs were formally identified at the university (Tables 3, 4, 5). The 3 instrument response options were: No, Yes or Do not know.

Assessment method(s): described what method(s) were used to collect student learning outcome data at the university (Tables 7, 8, 9). The 6 instrument response options were: "We do not formally assess this student learning outcome, We informally assess this student learning outcome, Written exams, Rubric to assess student work/portfolio, Rubric to assess direct observation of student in advising session, Rubric to assess reflective essays, Surveys/questionnaires", and respondents were allowed to select all options that applied (Powers, 2012, p. 29).

Assessment data: described how the advising assessment data were used to support and improve advising assessment practices (Tables 10, 11, 12). The 9 instrument response options were: "Revise advising pedagogy, Revise advising curriculum, Revise student learning outcomes, Revise process/delivery outcomes, Evaluate individual advisors, Evaluate the advising unit and services, Lobby for new resources based on assessment results, Fulfill assessment mandates of university administration, Fulfill assessment mandates of university accrediting body", respondents were allowed to select all options that applied (Powers, 2012, p. 30).

Dependent Variables

The dependent variables, producing consequences, are the 26 pre-defined

advising learning outcomes that convey what students are presumed to know, do, and

value (Robbins & Zarges, 2011, p. 3). The following defines each variable with

corresponding survey response options:

Cognitive advising learning outcomes describe whether the student knows: degree

requirements, policies, available majors, careers associated with major, how to calculate

their GPA, and where to locate campus resources (Table 3). Instrument response options

were: No, Yes or Do not know.

Behavioral advising learning outcomes (Table 4) describe whether the student

can:

demonstrate effective decision-making skills, develop long-term plans to meet their educational and career goals, use an educational plan to manage degree completion, use a career plan to manage industrial placement(s), engage with appropriate resources for academic success, engage with appropriate resources for industrial placement success, interpret a degree audit report for educational planning, use online student portal for career/industrial placement planning, prepare questions for advising appointment, use online registration system to enroll in classes, and access advising in a timely manner, indicating student's ability to "do". (Powers, 2012, pp. 28-29) Instrument response options were: No, Yes or Do not know.

Affective advising learning outcomes (Table 5) describe whether the student

values:

how personal values relate to their life goals, how their academic major reflects their personal interests, how their career goals reflect their personal interests, their ownership of educational/career placement experiences, how advising has contributed to their educational/career placement experiences, the role of industrial placement as part of their undergraduate experience, the benefits of university established industry relationships and the importance of interacting with faculty and staff, indicating what student's appreciate. (Powers, 2012, p. 29) Instrument response options were: No, Yes or Do not know.

Data Collectoin

The request to conduct this study was approved by the Institutional Review Board

at Andrews University (Appendix C). Administering the modified research survey

occurred during the Spring of 2019.

A Deputy Vice-President at the participating U.K. university assisted with

introducing the research study on my behalf and in the distribution of the survey through

online technology to those professionals responsible for advising (Appendix D). The

advising professionals were given 4 weeks to complete the survey. Survey deadline

reminders were sent to the target population after two weeks and again, 1 week before the

deadline (Appendix E).

An introductory note provided the survey description and explained the

significance of the dissertation research to the advising professionals. An incorporated

consent message in the survey explained that completing the Qualtrics study provided

the respondents consent for participating. Additionally, communication was included

apprising respondents they could choose not to participate even after beginning the

survey without any harm or risk (Rudestam & Newton, 2007). The participants were

given four weeks to complete the survey. Two supplemental emails (Appendix E) were

sent to the participants after the initial two weeks and again one week before the deadline

reminding them of the time limit and to promote survey completion. The survey deadline

was extended 2 weeks to encourage increased participation (Baruch & Holtom, 2008;

Zamir, Lewinsohn-Zamir, & Ritov, 2017).

The analytical software SPSS was used to describe evidential advising practices

in one U.K. undergraduate tertiary advising setting structured by the four defined

research questions. The survey responses were analyzed utilizing descriptive statistical analyses to address the research questions, as suggested by Creswell (2012), to "interpret the results of this analysis in light of … prior studies" (p. 15). These procedures can potentially reveal patterns within a data set and are common in organizing, and deriving meaning from, data (Lavrakas, 2008).

Each question allowed the participants to select all options that applied within their advising role and situation. Instances in this research where participants did not furnish responses to questions, values were not assigned or included in analyses. Researchers need to expect to work with missing data, according to Creswell (2012), as "some participants will not supply information, for whatever reason" (p. 182). Some survey response studies regarding validity found, as posited by Pike (2007), that "differences between respondents and non-respondents … are equivocal, although the preponderance of evidence suggests that these differences are relatively minor for many surveys" (p. 429). Moreover, Pike (2007) explains, that it is important for survey researchers "to understand that sampling designs and adjustments for nonresponse are derived from the mathematics of statistical inference … that not all decisions can or should be based on mathematical or statistical criteria" (p. 445).

Furthermore, the data in this study revealed whether there was any concept differences and sameness regarding the three outlined assessment practices with the data from the initial 2012 U.S. study (Hubbard, 2015; Lindsay & Ehrenberg, 1993).

<div align="center">Summary</div>

This chapter described the research methodology by providing an overview of the

quantitative, descriptive and non-experimental pre-existing survey design and data collection. This exercise noted the slightly modified survey to include questions reflecting career (industrial placement) advising. Additionally, information regarding the target population in clarifying their advising role (programme or industrial placement), advising situation (university, school/division/department level), the 3 defined independent (cause) and 26 dependent (effect) research variables, the instrumentation that encompassed four itemized sections and provided a framework for: 1) a more diverse worldview and 2) demonstrated cross-cultural competencies (differences and commonalities) was highlighted.

The process for collecting data included the introduction of the research study to participants, described the survey and research purpose and included a survey timeline with follow-up reminders. Data analysis was performed with SPSS software to obtain descriptive statistical analyses of the four research questions to quantitatively explain each question. Moreover, information from a survey pilot to a small population of experts at the participating university to capture and correct for any differences in culture was highlighted. Obtained data results from this study are offered in Chapter 4.

CHAPTER 4

RESULTS OF THE STUDY

Introduction

This chapter introduces the data analyses used to describe advising assessment

practices and elements perceived to support advising assessment at an urban career-

focused university in the United Kingdom.

Participants

The participants self-identified as faculty, staff or management responsible for

undergraduate advising either at the university, school/division or department level at the

international urban career-focused university. The survey included other demographic

questions delineating their position held at the university and length of time in their

position (Table 2). The data revealed their advising role as: 2% career, 61.5% academic,

26.9% academic and career, 9.6% as other; their advising situation as: 11.5% university

wide, 44.2% school/division, 38.5% department, 5.8% as other; their position at the

university as: 19.2% staff, 9.6% faculty and 2.0% as "other" (management); their length

of time in their position as: 11.1% fewer than 5 years, 3.8% between 5-10 years, 9.6%

between 10-20 years, 5.8% between 20-30 years. The majority of the participants

identified as academic advisers that advise within a school/division and are employed in a

staff position with less than 5 years at the university.

Participants were notified that their consent to participate in the study was given

upon completion of the survey and they could decide not to participate or terminate their

participation at any point. Each question allowed participants the opportunity to select all

applicable response options. Survey data used in the analyses of the study were obtained

from 52 advising professional; representing 21.40% response rate.

Table 2

Demographic Variables

	Participants	
Variable	N	%
Advising Role		
Career Advisor	1	2.0
Academic Advisor	32	61.5
Both Academic/Career	14	26.9
Other	5	9.6
Advising Situation		
University Wide	6	11.5
School/Division	23	44.2
University Department	20	38.5
Other	3	5.8
Position		
Faculty	5	9.6
Staff	10	19.2
Other	1	2.0
Time		
Less than 5 years	6	11.5
5-10 years	2	3.8
10-20 years	5	9.6
20-30 years	3	5.8

Results by Research Questions

Research Question 1

The initial question focused on: What are the advising student learning outcomes identified at the participating U.K. university? The first of three steps modeling "best practices" with respect to "measuring the effect of … advising on student learning" (Powers, 2012, p. v). Participants were able to check all that applied within their advising role and situation. The frequency distributions of the cognitive (know), behavioral (do) and affective (value) advising SLOs are reported in Tables 3, 4 and 5.

Table 3

Identified Cognitive Advising SLOs (Know)

	Participants	
Cognitive SLO	N	%
Student knows degree requirements	16	30.8
Student knows program/college policies	17	32.7
Student knows about academic majors available	8	15.4
Student knows about careers associated with their degree	16	30.8
Student knows how to schedule advising appointment	16	30.8
Student knows how to calculate GPA	4	7.7
Student knows where to locate resources on campus	15	28.8

This sample reporting described the 5 most identified cognitive advising learning outcomes, outlining the prospect of expected student knowledge at the U.K. university as: know degree requirements (30.8%), know program/college policies (32.7%), know about careers associated with their degree and know how to schedule an advising appointment (30.8%), and knowledgeable about locating resources on campus (28.8%).

Conversely, this sample reporting described 2 least identified cognitive student

learning outcomes as: student knows about academic majors available (15.4%) and

student knows how to calculate their GPA (7.7%) (Powers, 2012, p. 28).

Based on the survey responses, the students' knowledge of program/college

policies was the most identified cognitive student learning outcome (32.7%), while

student knows about careers associated with their degree, student knows degree

requirements and student knows how to schedule advising appointment (30.8%) were

equally the second most identified cognitive SLOs. Student knows how to calculate their

GPA was the least identified cognitive learning outcome at the U.K. university (7.7%).

Table 4

Identified Behavioral Advising SLOs (Do)

	Participants	
Behavioral SLO	N	%
Student demonstrates effective decision-making skills	9	17.3
Student able to develop long-term plans meet educational/career goals	14	27.0
Student uses educational plan to manage degree completion	7	13.5
Student uses career plan to manage industrial placement(s)	10	19.2
Student engages with appropriate resources for academic success	12	23.1
Student engages appropriate resources for industrial placement success	10	19.2
Student interprets degree audit report for educational planning	0	0
Student uses online portal for career/industrial placement planning	11	21.2
Student prepares questions for advising appointment	5	9.6
Student uses online registration system, Canvas, to enroll in classes	8	15.4
Student accesses advising in a timely manner	5	9.6

This sample reporting described the 7 most identified behavioral advising learning

outcomes, outlining the prospect of expected student actions at the U.K. university as:

able to develop long-term plans to meet educational and career goals (27.0%), engage

with appropriate resources for academic success (23.1%), use online student portal for

career/industrial placement planning (21.2%), use a career plan to manage industrial

placement(s) and engage with appropriate resources for industrial placement success

(19.2%), demonstrate effective decision-making skills (17.3%), and use online

registration system, Canvas, to enroll in classes (15.4%) (Powers, 2012).

Likewise, this sample reporting revealed the 4 least identified behavioral student

learning outcomes at the U.K. university as: "use an educational plan to manage degree

completion" (13.5%), "does prepare questions for advising appointment and accesses

advising in a timely manner" (9.6%) and able to "interpret a degree audit report for

educational planning: (0%) (Powers, 2012, pp. 28-29).

Based on the survey responses, the student's ability to create plans that meet their

long-term educational and career goals was the most identified behavioral student

learning outcome (27.0%), while student engages with appropriate resources for

academic success (23.1%) was the second most identified behavioral SLO. Whereas,

student's ability to use their program requirement online audit for their educational and

career projections was the least identified behavioral learning outcome at the U.K.

university (2.0%) (Powers, 2012).

Table 5

Identified Affective Advising SLOs (Value)

	Participants	
Affective SLO	N	%
Student appreciates how personal values relate to life goals	5	9.6
Student values how academic major reflects personal interests	6	11.5
Student values how career goals reflect personal interests	5	9.6
Student values ownership of educational/career placement experiences	9	17.3
Student values advising contribution: educational/career experiences	8	15.4
Student values role of industrial placement: undergraduate experiences	13	25.0
Student values benefits of university established industry relationships	9	17.3
Student values importance of interacting with faculty and staff	9	17.3

This sample reporting described the 5 most recognized affective advising learning outcomes, outlining what students are expected to value at the U.K. university as: values ownership of educational/career placement experiences (17.3%), values how advising has contributed to educational/career placement experiences (15.4%), values role of industrial placement as part of undergraduate experience (25.0%), values the benefits of university established industry relationships and values the importance of interacting with faculty and staff at (17.3%) (Powers, 2012).

This sample reporting also revealed the 3 least identified affective student learning outcomes at the U.K. university as: "values how academic major reflects personal interests" (11.5%), and student "appreciates how personal values relate to life goals" and "appreciates how career goals reflect personal interests" (9.6%) (Powers, 2012, p. 29).

Based on the survey responses, students appreciation for their undergraduate industrial placement was the most identified affective student learning outcome (25.0%), while student values ownership of educational/career placement experiences, student values benefits of university established industry relationships and student values importance of interacting with faculty and staff (17.3%) were correspondingly the second most identified affective SLOs. Yet, student appreciates the relationship between personal values and life goals and student values how career goals reflect personal interests were both the least identified affective learning outcome (9.6%) at the U.K. university (Powers, 2012).

Interestingly, the advising student learning outcomes that were identified with the highest frequency were represented within the 7 cognitive student learning outcomes

(know). Although the defined behavioral (do) and affective (value) student learning

outcome variables are greater in number, 11 and 8 respectively, cognitive learning

outcomes were more frequently chosen by respondents at 32.7% as presented in Table 6.

Table 6

Range of Identified Advising SLOs

	Percent	
Most identified	Low	High
Cognitive SLO	7.7	32.7
Behavioral	2.0	27.0
Affective	9.6	25.0

Research Question 2

The next research question examined: What are the advising methods utilized to

conduct assessment of advising SLOs at the participating U.K. university? The second of

three steps modeling "best practices" with respect to the "effect of … advising on student

learning" (Powers, 2012, p. v). Participants were able to check all that applied within

their advising role and situation. The frequency distributions of the advising methods

used to conduct advising assessment are reported in Tables 7, 8 and 9.

Table 7

Cognitive SLOs Assessment Methods

		Participants	
Cognitive SLO	Methods	N	%
1. Student	1. We do not formally assess this SLO	5	9.6
knows their	2. We informally assess this SLO	6	11.5
degree curricula	3. Written Exams	4	7.7
requirements	4. Rubric: student work/portfolio	11	21.2

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Table 7—Continued

Cognitive SLO	Methods	Participants N	%
1. Student knows their degree curricula requirements	5. Rubric: direct observation: advising session	8	15.4
	6. Rubric: reflective essays	6	11.5
	7. Surveys/questionnaires	9	17.3
	8. Do not know	1	1.9
2. Student knows program/college policies	1. We do not formally assess this SLO	3	5.8
	2. We informally assess this SLO	9	17.3
	3. Written Exams	7	13.5
	4. Rubric: student work/portfolio	8	15.4
	5. Rubric: direct observation: advising session	7	13.5
	6. Rubric: reflective essays	7	13.5
	7. Surveys/questionnaires	9	17.3
	8. Do not know	1	1.9
3. Student knows about academic majors available	1. We do not formally assess this SLO	2	3.8
	2. We informally assess this SLO	4	7.7
	3. Written Exams	3	5.8
	4. Rubric: student work/portfolio	5	9.6
	5. Rubric: direct observation: advising session	4	7.7
	6. Rubric: reflective essays	5	9.6
	7. Surveys/questionnaires	7	13.5
	8. Do not know	2	3.8
4. Student knows about careers associated with their program	1. We do not formally assess this SLO	1	1.9
	2. We informally assess this SLO	7	13.5
	3. Written Exams	1	1.9
	4. Rubric: student work/portfolio	3	5.8
	5. Rubric: direct observation: advising session	2	3.8
	6. Rubric: reflective essays	3	5.8
	7. Surveys/questionnaires	11	21.2
	8. Do not know	3	5.8
5. Student knows how to schedule an advising appointment	1. We do not formally assess this SLO	3	5.8
	2. We informally assess this SLO	9	17.3
	3. Written Exams	1	1.9
	4. Rubric: student work/portfolio	3	5.8
	5. Rubric: direct observation: advising session	2	3.8
	6. Rubric: reflective essays	2	3.8
	7. Surveys/questionnaires	6	11.5
	8. Do not know	2	3.8
6. Student knows how to calculate their GPA	1. We do not formally assess this SLO	0	0
	2. We informally assess this SLO	3	5.8
	3. Written Exams	1	1.9
	4. Rubric: student work/portfolio	1	1.9
	5. Rubric: direct observation: advising session	1	1.9

Table 7—Continued

Cognitive SLO	Methods	Participants	
		N	%
6. Student knows how to calculate their GPA	6. Rubric: reflective essays	1	1.9
	7. Surveys/questionnaires	2	3.8
	8. Do not know	4	7.7
7. Student knows where to locate resources on campus	1. We do not formally assess this SLO	3	5.8
	2. We informally assess this SLO	7	13.5
	3. Written Exams	2	3.8
	4. Rubric: student work/portfolio	2	3.8
	5. Rubric: direct observation: advising session	2	3.8
	6. Rubric: reflective essays	2	3.8
	7. Surveys/questionnaires	8	15.4
	8. Do not know	1	1.9

This sample reporting described the methods used to conduct assessment of advising cognitive SLOs, emphasizing "what students are expected to know" at the U.K. university (Robbins & Zarges, 2011, p. 3). The majority of responses (n = 45) indicated that all 7 cognitive SLOs were informally assessed.

The two highest reported assessment methods, both at 21.2%, included surveys/questionnaires and using a rubric to assess student work/portfolio for the cognitive SLOs (#1): student knows their degree curricula requirements of the college/department; and using surveys/questionnaires for the cognitive SLO (#4): student knows about careers associated with their program. Four of the defined SLOs revealed the next highest reported assessment method included using a rubric to assess direct observation of student in advising session for the cognitive SLOs: (#1) student knows their degree curricula requirements of the college/department (15.4%), (#2) student knows program/college policies (13.5%), (#3) student knows about academic majors available (7.7%), and (#4) student knows about careers associated with their program (3.8%)

(Powers, 2012, p. 28). Conversely, the majority of respondents reported that the least

used method to conduct assessment of all the cognitive SLOs were written exams.

Based on the survey responses, surveys/questionnaires and student work/portfolio

rubrics were the leading assessment methods and written exams were the least utilized

assessment method at the U.K. university.

Table 8

Behavioral SLOs Assessment Methods

		Participants	
Behavioral SLO	Methods	N	%
8. Student is able to demonstrate effective decision-making skills	1. We do not formally assess this SLO	1	1.9
	2. We informally assess this SLO	3	5.8
	3. Written Exams	5	9.6
	4. Rubric: student work/portfolio	6	11.5
	5. Rubric: direct observation: advising session	5	9.6
	6. Rubric: reflective essays	6	11.5
	7. Surveys/questionnaires	7	13.5
	8. Do not know	1	1.9
9. Student is able to develop long-term plans to meet educational and career goals	1. We do not formally assess this SLO	3	5.8
	2. We informally assess this SLO	8	15.4
	3. Written Exams	2	3.8
	4. Rubric: student work/portfolio	3	5.8
	5. Rubric: direct observation: advising session	3	5.8
	6. Rubric: reflective essays	4	7.7
	7. Surveys/questionnaires	7	13.5
	8. Do not know	2	3.8
10. Student uses an educational plan to manage progress toward degree completion	1. We do not formally assess this SLO	3	5.8
	2. We informally assess this SLO	4	7.7
	3. Written Exams	0	0
	4. Rubric: student work/portfolio	0	0
	5. Rubric: direct observation: advising session	0	0
	6. Rubric: reflective essays	1	1.9
	7. Surveys/questionnaires	1	1.9
	8. Do not know	2	3.8
11. Student uses a career plan to manage progress	1. We do not formally assess this SLO	3	5.8
	2. We informally assess this SLO	6	11.5
	3. Written Exams	3	5.8

Table 8—Continued

Behavioral SLO	Methods	Participants	
		N	%
11. toward industrial placement(s)	5. Rubric: direct observation: advising session	3	5.8
	6. Rubric: reflective essays	3	5.8
	7. Surveys/questionnaires	7	13.5
	8. Do not know	1	1.9
12. Student engages with appropriate resources to meet needs for academic success	1. We do not formally assess this SLO	3	5.8
	2. We informally assess this SLO	5	9.6
	3. Written Exams	0	0
	4. Rubric: student work/portfolio	4	7.7
	5. Rubric: direct observation: advising session	3	5.8
	6. Rubric: reflective essays	2	3.8
	7. Surveys/questionnaires	5	9.6
	8. Do not know	1	1.9
13. Student engages with appropriate resources to meet needs for industrial placement(s) success	1. We do not formally assess this SLO	3	5.8
	2. We informally assess this SLO	5	9.6
	3. Written Exams	0	0
	4. Rubric: student work/portfolio	4	7.7
	5. Rubric: direct observation: advising session	3	5.8
	6. Rubric: reflective essays	2	3.8
	7. Surveys/questionnaires	5	9.6
	8. Do not know	1	1.9
14. Student interprets a degree audit report for educational and career planning	1. We do not formally assess this SLO	1	1.9
	2. We informally assess this SLO	0	0
	3. Written Exams	0	0
	4. Rubric: student work/portfolio	0	0
	5. Rubric: direct observation: advising session	0	0
	6. Rubric: reflective essays	0	0
	7. Surveys/questionnaires	0	0
	8. Do not know	3	5.8
15. Student uses online student portal for career/industrial placement planning	1. We do not formally assess this SLO	1	1.9
	2. We informally assess this SLO	6	11.5
	3. Written Exams	0	0
	4. Rubric: student work/portfolio	2	3.8
	5. Rubric: direct observation: advising session	1	1.9
	6. Rubric: reflective essays	2	3.8
	7. Surveys/questionnaires	6	11.5
	8. Do not know	1	1.9
16. Student prepares questions for an	1. We do not formally assess this SLO	3	5.8
	2. We informally assess this SLO	4	7.7
	3. Written Exams	0	0
	4. Rubric: student work/portfolio	0	0

Table 8—Continued

Behavioral SLO	Methods	Participants	
		N	%
16. advising appointment	5. Rubric: direct observation: advising session	0	0
	6. Rubric: reflective essays	0	0
	7. Surveys/questionnaires	1	1.9
	8. Do not know	2	3.8
17. Student uses the online registration system, Canvas, to enroll in classes	1. We do not formally assess this SLO	3	5.8
	2. We informally assess this SLO	3	5.8
	3. Written Exams	0	0
	4. Rubric: student work/portfolio	1	1.9
	5. Rubric: direct observation: advising session	0	0
	6. Rubric: reflective essays	1	1.9
	7. Surveys/questionnaires	1	1.9
	8. Do not know	3	5.8
18. Student accesses advising in a timely manner	1. We do not formally assess this SLO	1	1.9
	2. We informally assess this SLO	3	5.8
	3. Written Exams	0	0
	4. Rubric: student work/portfolio	0	0
	5. Rubric: direct observation: advising session	0	0
	6. Rubric: reflective essays	0	0
	7. Surveys/questionnaires	2	3.8
	8. Do not know	2	3.8

This sample reporting described the methods used to conduct assessment of the 11 behavioral SLOs, underscoring what students are expected to do, at the U.K. university. The majority of responses (n =47) indicated that behavioral SLOs were informally assessed.

The most frequently reported behavioral assessment methods were the use of surveys/questionnaires for 8 of the 11 behavioral SLOs. Four of the defined SLOs revealed the next highest reported assessment method included using a rubric to assess student work/portfolio for the following behavioral SLOs: (#8) student is able to demonstrate effective decision-making skills (11.5%), (#12) student engages with appropriate resources to meet individual needs for academic success (7.7%), (#13)

student engages with appropriate resources to meet individual needs for industrial

placement(s) success (7.7%), and (#15) student uses the online student portal for

career/industrial placement planning (3.8%) (Powers, 2012, p. 29).

Conversely, respondents reported that written exams were the least used method

to conduct assessment for the following 4 behavioral SLOs: (#8) student is able to

demonstrate effective decision-making skills (9.6%), (#12) student engages with

appropriate resources to meet individual needs for academic success (0%), (#13) student

engages with appropriate resources to meet individual needs for industrial placement(s)

success (0%), and (#15) student uses the online student portal for career/industrial

placement planning (0%) (Powers, 2012, p. 29).

Based on the survey responses, surveys/questionnaires were the leading

behavioral SLO assessment method and written exams were the least utilized assessment

method at the U.K. university.

Table 9

Affective SLOs Assessment Methods

Affective SLO	Methods	Participants	
		N	%
19. Student appreciates how personal values relate to life goals	1. We informally assess this SLO	3	5.8
	2. Written Exams	0	0
	3. Rubric: student work/portfolio	0	0
	4. Rubric: direct observation: adv session	0	0
	5. Rubric: reflective essays	0	0
	6. Surveys/questionnaires	2	3.8
20. Student values their academic major reflects personal interests	1. We informally assess this SLO	3	5.8
	2. Written Exams	0	0
	3. Rubric: student work/portfolio	0	0
	4. Rubric: direct observation: adv session	0	0
	5. Rubric: reflective essays	1	1.9
	6. Surveys/questionnaires	1	1.9

Table 9—Continued

Affective SLO	Methods	Participants N	%
21. Student appreciates their career goals reflect personal interests	1. We informally assess this SLO	1	1.9
	2. Written Exams	0	0
	3. Rubric: student work/portfolio	0	0
	4. Rubric: direct observation: adv session	0	0
	5. Rubric: reflective essays	0	0
	6. Surveys/questionnaires	0	0
22. Student appreciates ownership of educational and career placement experiences	1. We informally assess this SLO	4	7.7
	2. Written Exams	0	0
	3. Rubric: student work/portfolio	2	3.8
	4. Rubric: direct observation: adv session	0	0
	5. Rubric: reflective essays	2	3.8
	6. Surveys/questionnaires	5	9.6
23. Student appreciates how advising contributions to educational and career placement experiences	1. We informally assess this SLO	3	5.8
	2. Written Exams	0	0
	3. Rubric: student work/portfolio	1	1.9
	4. Rubric: direct observation: adv session	0	0
	5. Rubric: reflective essays	1	1.9
	6. Surveys/questionnaires	3	5.8
24. Student appreciates the role of industrial placement as part undergraduate experiences	1. We informally assess this SLO	2	3.8
	2. Written Exams	0	0
	3. Rubric: student work/portfolio	6	11.5
	4. Rubric: direct observation: adv session	1	1.9
	5. Rubric: reflective essays	4	7.7
	6. Surveys/questionnaires	9	17.3
25. Student appreciates benefits of university established industry relationships	1. We informally assess this SLO	2	3.8
	2. Written Exams	1	1.9
	3. Rubric: student work/portfolio	3	5.8
	4. Rubric: direct observation: adv session	2	3.8
	5. Rubric: reflective essays	2	3.8
	6. Surveys/questionnaires	4	7.7
26. Student values importance of interacting with academic and career support staff	1. We informally assess this SLO	5	9.6
	2. Written Exams	0	0
	3. Rubric: student work/portfolio	0	0
	4. Rubric: direct observation: adv session	1	1.9
	5. Rubric: reflective essays	0	0
	6. Surveys/questionnaires	6	11.5

This sample reporting described the methods used to conduct assessment of the 8

affective SLOs, featuring what students are expected to value at the U.K. university. The

response rate for this affective SLO method(s) question was lower in comparison to the response rates of the cognitive and behavioral methods question, nevertheless the majority of respondents (n = 19) reported that affective SLOs were informally assessed.

The most frequently reported assessment method used for affective SLOs was the use of surveys/questionnaires for 7 of the 8 SLOs: (#19) student appreciates how personal values relate to life goals (3.8%), (#20) student values how their academic major reflects personal interests (1.9%), (#22) student appreciates having a sense of ownership of one's educational and career placement experiences (9.6%), (#23) student appreciates how advising has contributed to their educational and career placement experiences (5.8%), (#24) student appreciates the role of industrial placement as part of their undergraduate experience (17.3%), (#25) student appreciates the benefits of university established industry relationships (7.7%), and (#26) student values the importance of interacting with academic and career support staff (11.5%) (Powers, 2012, p. 30).

Conversely, respondents reported that the least used methods to conduct assessment were: written exams and rubric to assess direct observation of student in advising session equally for (#19) student appreciates how personal values relate to life goals, (#20) student values how their academic major reflects personal interests, (#21) student appreciates how their career goals reflect personal interests, (#22) student appreciates having a sense of ownership of one's educational and career placement experiences, and (#23) student appreciates how advising has contributed to their educational and career placement experiences (0%) (Powers, 2012, p. 30).

Based on the survey responses, surveys/questionnaires were the leading affective SLO assessment method and written exams and rubrics to assess direct observation of

student in advising session were the least utilized assessment methods at the U.K.

university (Powers, 2012, p. 28).

The responses to question two revealed that surveys/questionnaires were the

assessment method used with the most frequency within all SLOs, (cognitive, behavioral

and affective) and that multiple assessment methods were utilized at the U.K. university

(Tables 14, 15 and 16).

Research Question 3

The next research question considered: How are the advising assessment

data used for advising co-curricular improvement(s) at the participating U.K. university?

This is delineated as the last integral step in modeling "best practices" with respect to the

"effect of … advising on student learning" (Powers, 2012, p. v). Participants were able to

check all that applied within their advising role and situation. The frequency distributions

of advising assessment data use for advising co-curricular program improvements are

reported in Table 10, 11 and 12.

Table 10

Cognitive SLOs Assessment Data Use

Cognitive SLO	Use	Participants	
		N	%
1. Student knows their degree curricula	1. Revise advising pedagogy	9	17.3
	2. Revise advising curriculum	9	17.3
	3. Revise SLO	7	13.5
	4. Revise process/delivery outcomes	11	21.2

Table 10—Continued

Cognitive SLO	Use	Participants N	%
1. degree curricula requirements	5. Evaluate individual advisors	6	11.5
	6. Evaluate advising unit/services	4	7.7
	7. Lobby for new resources	4	7.7
	8. Fulfill assessment mandates: administration	5	9.6
	9. Fulfill assessment mandates: accrediting body	6	11.5
2. Student knows program/college policies	1. Revise advising pedagogy	6	11.5
	2. Revise advising curriculum	10	19.2
	3. Revise SLO	9	17.3
	4. Revise process/delivery outcomes	8	15.4
	5. Evaluate individual advisors	6	11.5
	6. Evaluate advising unit/services	6	11.5
	7. Lobby for new resources	4	7.7
	8. Fulfill assessment mandates: administration	5	9.6
	9. Fulfill assessment mandates: accrediting body	6	11.5
3. Student knows about academic majors available	1. Revise advising pedagogy	4	7.7
	2. Revise advising curriculum	6	11.5
	3. Revise SLO	4	7.7
	4. Revise process/delivery outcomes	4	7.7
	5. Evaluate individual advisors	3	5.8
	6. Evaluate advising unit/services	3	5.8
	7. Lobby for new resources	3	5.8
	8. Fulfill assessment mandates: administration	3	5.8
	9. Fulfill assessment mandates: accrediting body	3	5.8
4. Student knows about careers associated with their program	1. Revise advising pedagogy	4	7.7
	2. Revise advising curriculum	9	17.3
	3. Revise SLO	6	11.5
	4. Revise process/delivery outcomes	9	17.3
	5. Evaluate individual advisors	3	5.8
	6. Evaluate advising unit/services	5	9.6
	7. Lobby for new resources	2	3.8
	8. Fulfill assessment mandates: administration	3	5.8
	9. Fulfill assessment mandates: accrediting body	2	3.8
5. Student knows how to schedule an advising appointment	1. Revise advising pedagogy	6	11.5
	2. Revise advising curriculum	5	9.6
	3. Revise SLO	5	9.6
	4. Revise process/delivery outcomes	7	13.5
	5. Evaluate individual advisors	5	9.6
	6. Evaluate advising unit/services	9	17.3

Table 10—Continued

Cognitive SLO	Use	Participants	
		N	%
5. Student schedule an appointment	7. Lobby for new resources	5	9.6
	8. Fulfill assessment mandates: administration	4	7.7
	9. Fulfill assessment mandates: accrediting body	3	5.8
6. Student knows how to calculate their GPA	1. Revise advising pedagogy	1	1.9
	2. Revise advising curriculum	1	1.9
	3. Revise SLO	1	1.9
	4. Revise process/delivery outcomes	3	5.8
	5. Evaluate individual advisors	1	1.9
	6. Evaluate advising unit/services	0	0
	7. Lobby for new resources	0	0
	8. Fulfill assessment mandates: administration	1	1.9
	9. Fulfill assessment mandates: accrediting body	1	1.9
7. Student knows where to locate resources on campus	1. Revise advising pedagogy	4	7.7
	2. Revise advising curriculum	4	7.7
	3. Revise SLO	3	5.8
	4. Revise process/delivery outcomes	5	9.6
	5. Evaluate individual advisors	2	3.8
	6. Evaluate advising unit/services	6	11.5
	7. Lobby for new resources	5	9.6
	8. Fulfill assessment mandates: administration	4	7.7
	9. Fulfill assessment mandates: accrediting body	3	5.8

This sample reporting described how assessment data were used for advising co-curricular improvement(s) for the 7 cognitive SLOs.

The cognitive SLO (#1) student knows degree curricula requirements revealed that these assessment data were most often used to revise process/delivery outcomes (21.2%). However, these assessment data were not typically used for the evaluation of advising unit/services or to lobby for new resources (7.7%). The cognitive SLO (#2) student knows program/college policies requirements revealed that these assessment data were most often used to revise advising curriculum (19.2%). However, these assessment data were not typically used to lobby for new resources (7.7%). The cognitive SLO (#3)

student knows about academic majors available revealed these assessment data were most often used to revise advising curriculum (11.5%). However, these assessment data were not typically used to improve this advising SLO, to lobby for new resources or to fulfill administration and accrediting body assessment mandates (5.8%). The cognitive SLO (#4) student knows about careers associated with their program revealed that these assessment data were most often used to revise advising curriculum and process/delivery outcomes (17.3%). However, these assessment data were not typically used to lobby for new resources or to fulfill accrediting body assessment mandates (3.8%). The cognitive SLO (#5) student knows how to schedule an advising appointment revealed these assessment data were most often used to evaluate advising unit/services (17.3%). However, these assessment data were not typically used to fulfill accrediting body assessment mandates (5.8%). The cognitive SLO (#6) student knows how to calculate their GPA revealed that these assessment data were most often used to revise process/delivery outcomes (5.8%). However, these assessment data were not typically used to evaluate individual advisors or advising unit/services (0%). The cognitive SLO (#7) student knows where to locate resources on campus revealed that these assessment data were most often used to evaluate advising unit/services (11.5%). However, these assessment data were not typically used to evaluate individual advisors (3.8%) (Powers, 2012, p. 30).

Based on the survey responses the leading use of cognitive assessment data included: to revise process/delivery outcomes and advising curriculum, and to evaluate advising unit/services (Figure 2) at the U.K. university (Powers, 2012, p. 30).

Cognitive SLOs: Top 3 Assessment Data Uses

Data Use	SLO	Percent
Evaluate advising unit/services	7. Student knows where to locate resources on campus	11.5
Revise advising curriculum	4. Student knows about careers associated with their program	17.3
	3. Student knows about academic majors available	11.5
	2. Student knows program/college policies	19.2
Revise process/delivery outcomes	4. Student knows about careers associated with their program	17.3
	6. Student knows how to calculate their GPA	5.8
	5. Student knows how to schedule an advising appointment	13.5
	1. Student knows their degree curricula requirements	21.2

Figure 2. Data uses for cognitive student learning outcomes.

Table 11

Behavioral SLOs Assessment Data Use

		Participants	
Behavioral SLO	Use	N	%
8. Student is able to demonstrate effective decision-making skills	1. Revise advising pedagogy	6	11.5
	2. Revise advising curriculum	6	11.5
	3. Revise SLO	5	9.6
	4. Revise process/delivery outcomes	4	7.7
	5. Evaluate individual advisors	3	5.8
	6. Evaluate advising unit/services	4	7.7
	7. Lobby for new resources	4	7.7
	8. Fulfill assessment mandates: administration	5	9.6
	9. Fulfill assessment mandates: accrediting body	5	9.6

Table 11—Continued

Behavioral SLO	Use	Participants	
		N	%
9. Student is able to develop long-term plans to meet educational and career goals	1. Revise advising pedagogy	3	5.8
	2. Revise advising curriculum	4	7.7
	3. Revise SLO	2	3.8
	4. Revise process/delivery outcomes	8	15.4
	5. Evaluate individual advisors	2	3.8
	6. Evaluate advising unit/services	3	5.8
	7. Lobby for new resources	3	5.8
	8. Fulfill assessment mandates: administration	5	9.6
	9. Fulfill assessment mandates: accrediting body	4	7.7
10. Student uses an educational plan to manage progress toward degree completion	1. Revise advising pedagogy	1	1.9
	2. Revise advising curriculum	2	3.8
	3. Revise SLO	2	3.8
	4. Revise process/delivery outcomes	2	3.8
	5. Evaluate individual advisors	2	3.8
	6. Evaluate advising unit/services	1	1.9
	7. Lobby for new resources	2	3.8
	8. Fulfill assessment mandates: administration	2	3.8
	9. Fulfill assessment mandates: accrediting body	2	3.8
11. Student uses a career plan to manage progress toward industrial placements	1. Revise advising pedagogy	2	3.8
	2. Revise advising curriculum	5	9.6
	3. Revise SLO	3	5.8
	4. Revise process/delivery outcomes	5	9.6
	5. Evaluate individual advisors	0	0
	6. Evaluate advising unit/services	4	1.9
	7. Lobby for new resources	3	5.8
	8. Fulfill assessment mandates: administration	4	7.7
	9. Fulfill assessment mandates: accrediting body	3	5.8
12. Student engages with appropriate resources to meet needs for academic success	1. Revise advising pedagogy	3	5.8
	2. Revise advising curriculum	6	3.8
	3. Revise SLO	3	5.8
	4. Revise process/delivery outcomes	6	11.5
	5. Evaluate individual advisors	3	5.8
	6. Evaluate advising unit/services	2	3.8
	7. Lobby for new resources	6	11.5
	8. Fulfill assessment mandates: administration	4	7.7
	9. Fulfill assessment mandates: accrediting body	3	5.8

Table 11—Continued

Behavioral SLO	Use	Participants N	%
13. Student engages appropriate resources to meet needs for industrial placement success	1. Revise advising pedagogy	4	7.7
	2. Revise advising curriculum	5	9.6
	3. Revise SLO	3	5.8
	4. Revise process/delivery outcomes	6	11.5
	5. Evaluate individual advisors	3	5.8
	6. Evaluate advising unit/services	4	7.7
	7. Lobby for new resources	5	9.6
	8. Fulfill assessment mandates: administration	3	5.8
	9. Fulfill assessment mandates: accrediting body	2	3.8
14. Student interprets a degree audit report for educational and career planning	1. Revise advising pedagogy	1	1.9
	2. Revise advising curriculum	1	1.9
	3. Revise SLO	1	1.9
	4. Revise process/delivery outcomes	0	0
	5. Evaluate individual advisors	1	1.9
	6. Evaluate advising unit/services	1	1.9
	7. Lobby for new resources	1	1.9
	8. Fulfill assessment mandates: administration	1	1.9
	9. Fulfill assessment mandates: accrediting body	1	1.9
15. Student uses the online student portal for career/industrial placement planning	1. Revise advising pedagogy	1	1.9
	2. Revise advising curriculum	6	11.5
	3. Revise SLO	5	9.6
	4. Revise process/delivery outcomes	5	9.6
	5. Evaluate individual advisors	2	3.8
	6. Evaluate advising unit/services	5	9.6
	7. Lobby for new resources	3	5.8
	8. Fulfill assessment mandates: administration	2	3.89
	9. Fulfill assessment mandates: accrediting body	1	1.9
16. Student prepares questions for an advising appointment	1. Revise advising pedagogy	1	1.9
	2. Revise advising curriculum	1	1.9
	3. Revise SLO	1	1.9
	4. Revise process/delivery outcomes	2	3.8
	5. Evaluate individual advisors	1	1.9
	6. Evaluate advising unit/services	2	3.8
	7. Lobby for new resources	1	1.9
	8. Fulfill assessment mandates: administration	3	5.8
	9. Fulfill assessment mandates: accrediting body	2	3.8
17. Student uses online registration system	1. Revise advising pedagogy	0	0
	2. Revise advising curriculum	1	1.9
	3. Revise SLO	0	0
	4. Revise process/delivery outcomes	2	3.8
	5. Evaluate individual advisors	1	1.9

Table 11—Continued

Behavioral SLO	Use	Participants	
		N	%
17. Student uses online registration system	6. Evaluate advising unit/services	3	5.8
	7. Lobby for new resources	1	1.9
	8. Fulfill assessment mandates: administration	0	0
	9. Fulfill assessment mandates: accrediting body	0	0
18. Student accesses advising in a timely manner	1. Revise advising pedagogy	0	0
	2. Revise advising curriculum	0	0
	3. Revise SLO	0	0
	4. Revise process/delivery outcomes	2	3.8
	5. Evaluate individual advisors	1	1.9
	6. Evaluate advising unit/services	2	3.8
	7. Lobby for new resources	1	1.9
	8. Fulfill assessment mandates: administration	0	0
	9. Fulfill assessment mandates: accrediting body	0	0

This sample reporting described how assessment data were used for the 11 behavioral SLOs.

The behavioral SLO (#8) student is able to demonstrate effective decision-making skills revealed that these assessment data were most often used to revise advising pedagogy and advising curriculum (11.5%). However, these assessment data were not usually used to evaluate individual advisors (5.8%). The behavioral SLO (#9) student is able to develop long-term plans to meet educational and career goals revealed that these assessment data were most often used to revise process/delivery outcomes (15.4%). However, these assessment data were not usually used to revise this SLO or to evaluate individual advisors (3.8%). The behavioral SLO (#10) student uses an educational plan to manage progress toward degree completion revealed that 7 of the 9 options were equally utilized (3.8%). However, the assessment data that were used the least to improve this advising SLO (#10) were for revising advising pedagogy (1.9%). The behavioral SLO

(#11) student uses a career plan to manage progress toward industrial placements revealed that these assessment data were most often used to revise advising curriculum and process/delivery outcomes (9.6%). However, these assessment data were not usually used to evaluate advising unit/services (1.9%). The behavioral SLO (#12) student engages with appropriate resources to meet needs for academic success revealed that these assessment data were most often used to revise process/delivery outcomes and to lobby for new resources (11.5%). However, these assessment data were not usually used to revise advising curriculum or to evaluate advising unit/services (3.8%). The behavioral SLO (#13) student engages with appropriate resources to meet needs for industrial placement success revealed that these assessment data were most often used to revise process/delivery services (11.5%). However, these assessment data were not usually used to fulfill accrediting body assessment mandates (3.8%). The behavioral SLO (#14) student interprets a degree audit report for educational and career planning revealed that 8 of the 9 options were equally utilized (1.9%). However, the assessment data that were used the least were to revise process/delivery outcomes (0%). The behavioral SLO (#15) student uses the online student portal for career/industrial placement planning revealed that these assessment data were most often used to revise advising curriculum (11.5%). However, these assessment data were not usually used to revise advising pedagogy or to fulfill accrediting body assessment mandates (1.9%). The behavioral SLO (#16) student prepares questions for an advising appointment revealed that these assessment data were most often used to fulfill administration assessment mandates (5.8%). However, these assessment data were not usually used to revise: advising pedagogy, advising curriculum, this SLO, or to evaluate individual advisors or lobby for new resources (1.9%). The

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behavioral SLO (#17) student uses the online registration system, Canvas, to enroll in classes revealed that these assessment data were most often used to evaluate advising unit/services (5.8%). However, these assessment data were not usually used to revise: advising pedagogy, this SLO, or to fulfill administration and accrediting body assessment mandates (0%). The behavioral SLO (#18) student accesses advising in a timely manner revealed that these assessment data were most often used to revise process/delivery outcomes and evaluate advising unit/services (3.8%). However, these assessment data were not usually used to revise: advising pedagogy, advising curriculum, this SLO, or to fulfill administration and accrediting body assessment mandates (0%) (Powers, 2012, p. 29).

Based on the survey responses, the leading use of behavioral assessment data were somewhat similar to cognitive assessment data uses and included: to revise advising pedagogy, process/delivery outcomes, advising curriculum; and to evaluate advising unit/services and to lobby for new resources (Figure 3) at the U.K. university (Powers, 2012, p. 29).
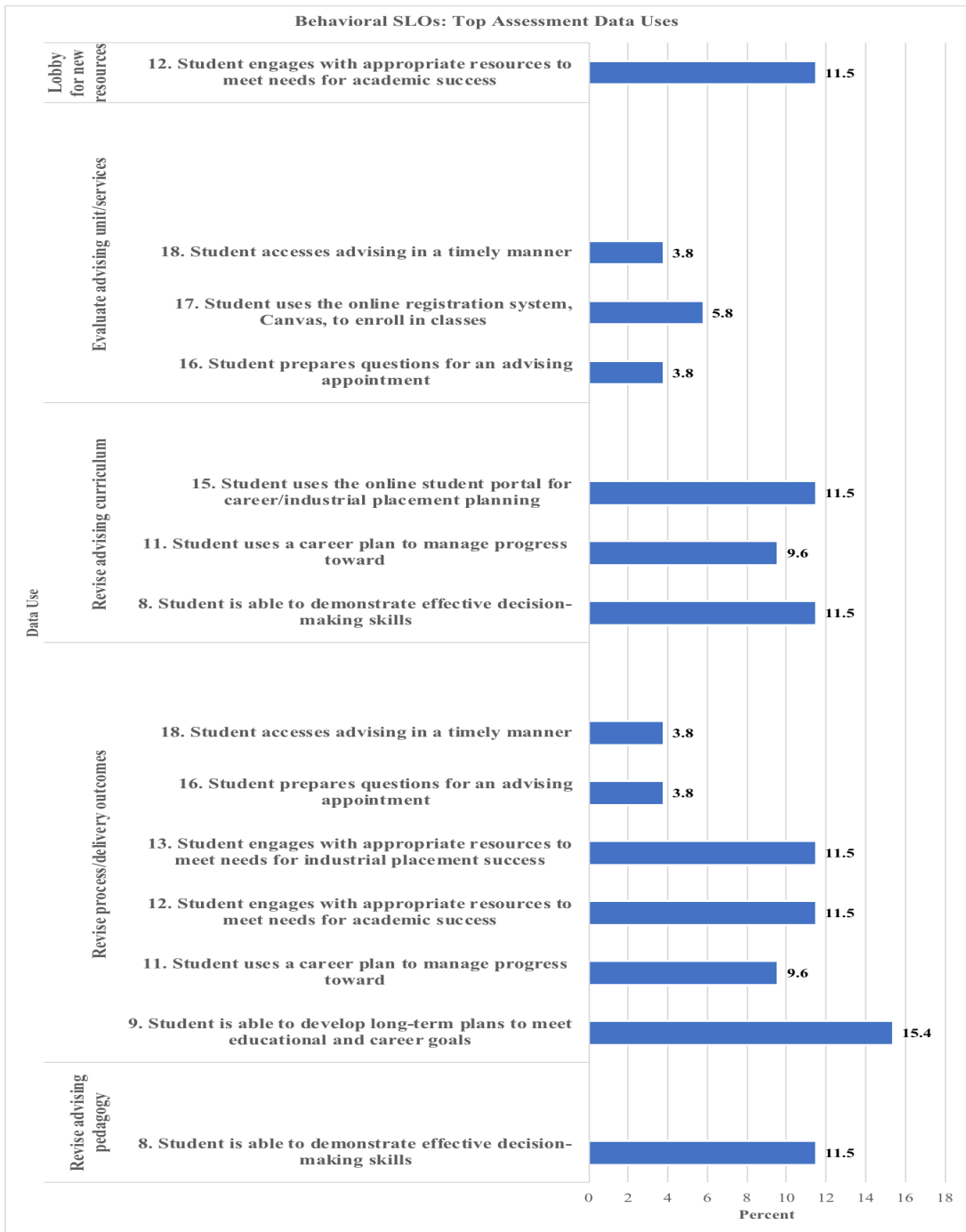
Figure 3. Data uses for behavioral student learning outcomes.

Table 12

Affective SLOs Assessment Data Use

Affective SLO	Use	Participants	
		N	%
19. Student appreciates how personal values relate to life goals	1. Revise advising pedagogy	2	3.8
	2. Revise advising curriculum	3	5.8
	3. Revise SLO	2	3.8
	4. Revise process/delivery outcomes	2	3.8
	5. Evaluate individual advisors	1	1.9
	6. Evaluate advising unit/services	2	3.8
	7. Lobby for new resources	1	1.9
	8. Fulfill assessment mandates: administration	1	0
	9. Fulfill assessment mandates: accrediting body	1	0
20. Student values how their academic major reflects personal interests	1. Revise advising pedagogy	3	5.8
	2. Revise advising curriculum	3	5.8
	3. Revise SLO	2	3.8
	4. Revise process/delivery outcomes	2	3.8
	5. Evaluate individual advisors	0	0
	6. Evaluate advising unit/services	1	1.9
	7. Lobby for new resources	0	0
	8. Fulfill assessment mandates: administration	1	1.9
	9. Fulfill assessment mandates: accrediting body	1	1.9
21. Student appreciates how their career goals reflect personal interests	1. Revise advising pedagogy	2	3.8
	2. Revise advising curriculum	1	1.9
	3. Revise SLO	1	1.9
	4. Revise process/delivery outcomes	1	1.9
	5. Evaluate individual advisors	0	0
	6. Evaluate advising unit/services	0	0
	7. Lobby for new resources	1	1.9
	8. Fulfill assessment mandates: administration	0	0
	9. Fulfill assessment mandates: accrediting body	0	0
22. Student appreciates ownership of educational and career placement experiences	1. Revise advising pedagogy	2	3.8
	2. Revise advising curriculum	4	7.7
	3. Revise SLO	4	7.7
	4. Revise process/delivery outcomes	2	3.8
	5. Evaluate individual advisors	2	3.8
	6. Evaluate advising unit/services	3	5.8
	7. Lobby for new resources	1	1.9
	8. Fulfill assessment mandates: administration	2	3.8
	9. Fulfill assessment mandates: accrediting body	1	1.9

Table 12—Continued

Affective SLO	Use	Participants N	%
23. Student appreciates advising contribution to educational and career placement experiences	1. Revise advising pedagogy	2	3.8
	2. Revise advising curriculum	2	3.8
	3. Revise SLO	3	5.8
	4. Revise process/delivery outcomes	2	3.8
	5. Evaluate individual advisors	1	1.9
	6. Evaluate advising unit/services	1	1.9
	7. Lobby for new resources	1	1.9
	8. Fulfill assessment mandates: administration	1	1.9
	9. Fulfill assessment mandates: accrediting body	0	0
24. Student appreciates role of industrial placement in their undergraduate experience	1. Revise advising pedagogy	3	5.8
	2. Revise advising curriculum	7	13.5
	3. Revise SLO	5	9.6
	4. Revise process/delivery outcomes	4	7.7
	5. Evaluate individual advisors	3	5.8
	6. Evaluate advising unit/services	4	7.7
	7. Lobby for new resources	1	1.9
	8. Fulfill assessment mandates: administration	4	7.7
	9. Fulfill assessment mandates: accrediting body	3	5.8
25. Student appreciates benefits of university established industry relationships	1. Revise advising pedagogy	3	5.8
	2. Revise advising curriculum	4	7.7
	3. Revise SLO	3	5.8
	4. Revise process/delivery outcomes	6	11.5
	5. Evaluate individual advisors	1	1.9
	6. Evaluate advising unit/services	3	5.8
	7. Lobby for new resources	2	3.8
	8. Fulfill assessment mandates: administration	2	3.8
	9. Fulfill assessment mandates: accrediting body	1	1.9
26. Student values interacting with academic and career support staff	1. Revise advising pedagogy	1	1.9
	2. Revise advising curriculum	2	3.8
	3. Revise SLO	1	1.9
	4. Revise process/delivery outcomes	1	1.9
	5. Evaluate individual advisors	4	7.7
	6. Evaluate advising unit/services	5	9.6
	7. Lobby for new resources	1	1.9
	8. Fulfill assessment mandates: administration	0	0
	9. Fulfill assessment mandates: accrediting body	0	0

This sample reporting described how assessment data were used for the 8 affective SLOs.

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The affective SLO (#19) "student appreciates how personal values relate to life goals" revealed that these assessment data were most often used to revise process/delivery outcomes and to evaluate advising unit/services (3.8%). However, these assessment data were not generally used to revise: advising pedagogy, advising curriculum, this SLO, or to fulfill administration and accrediting body assessment mandates (0%). The affective SLO (#20) student values how their academic major reflects personal interests revealed that these assessment data were most often used to revise advising pedagogy and curriculum (5.8%). However, these assessment data were not generally used to evaluate individual advisors (0%). The affective SLO (#21) student appreciates how their career goals reflect personal interests revealed that these assessment data were most often used to revise advising pedagogy (3.8%). However, these assessment data were not generally used to evaluate individual advisers and advising unit/services; or to fulfill administration and accrediting body assessment mandates (0%). The affective SLO (#22) student appreciates ownership of educational and career placement experiences revealed that these assessment data were most often used to revise advising curriculum and this SLO (7.7%). However, these assessment data were not generally used to lobby for new resources or to fulfill accrediting body assessment mandates (1.9%). The affective SLO (#23) student appreciates advising contribution to educational and career placement experiences revealed that these assessment data were most often used to revise this SLO (5.8%). However, these assessment data were not generally used to fulfill accrediting body assessment mandates (0%). The affective SLO (#24) student appreciates role of industrial placement in their undergraduate experience revealed that these assessment data were most often used to

revise advising curriculum (13.5%). However, these assessment data were not generally used to lobby for new resources (1.9%). The affective SLO (#25) student appreciates benefits of university established industry relationships revealed that these assessment data were most often used to revise process/delivery outcomes (11.5%). However, these assessment data were not generally used to evaluate individual advisers or to fulfill accrediting body assessment mandates (1.9%). The affective SLO (#26) student values interacting with academic and career support staff revealed that these assessment data were most often used to evaluate advising unit/services (9.6%). However, these assessment data were not generally used to fulfill administration and accrediting body assessment mandates (0%) (Powers, 2012, p. 30).

Based on the survey responses, the leading use of affective assessment data included revising: advising pedagogy, process/delivery outcomes, advising curriculum and the specified SLO, in addition to evaluating advising unit/services (Figure 4) at the U.K. university.
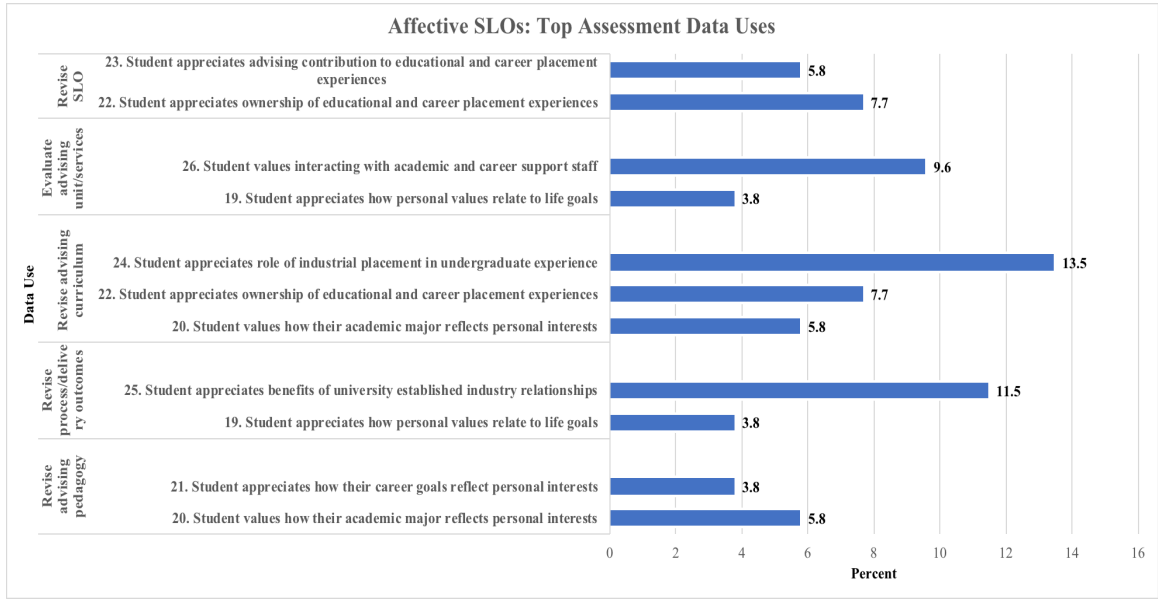
Figure 4. Data uses for affective student learning outcomes.

Research Question 4

The last research question investigated: What elements are viewed as supporting the assessment of advising at the participating U.K. university? Participants were able to check all that applied within their advising role and situation. The frequency distributions of the elements viewed by the respondents as supportive of advising assessment are reported in Table 13.

Table 13

Elements Supporting the Assessment of Advising

Perception	Elements	Very Important/ Important		Neutral		Very Unimportant/ Unimportant	
		n	%	n	%	n	%
Advisors need:	To believe that assessment of advising is a worthwhile endeavor	15	28.8			1	1.9
	To know how to conduct assessment of advising	14	26.9	1	1.9	1	1.9
	To feel confident in their abilities to properly conduct assessment of advising	14	26.9	1	1.9	1	1.9
	More information about what similar universities are doing to assess advising	14	26.9	1	1.9	1	1.9
	More information about tools and approaches for assessment of advising	13	25.0	2	3.8	1	1.9
	To collect better assessment data	12	23.1	3	5.8	1	1.9
	More time to conduct assessment of advising activities	12	23.1	3	5.8	1	1.9
	Better measures for assessment of advising	11	21.2	4	7.7	1	1.9
	To enjoy the assessment of advising process	10	19.2	4	7.7	2	3.8
	To be rewarded for assessment of advising activities	8	15.4	7	13.5	1	1.9
Administration needs:	To provide staff more time for assessment of advising	13	25.0	2	3.8	1	1.9
	To provide more support for the assessment of advising	12	23.1	3	5.8	1	1.9
	To require more lecturers/support staff involvement in assessment of advising	11	21.2	4	7.7	1	1.9
	To use assessment information to make decisions and changes	11	21.2	4	7.7	1	1.9
Advisees need:	To be more willing to participate in assessment of advising	12	23.1	3	5.8	1	1.9

The findings revealed 4 emerging elements for advisors and administration and one element for advisees in support of assessment of advising. The main, perceived, advisor elements important in supporting advisor assessment included: to believe that advising assessment is a worthwhile endeavor (28.8%) and to know how to conduct assessment of advising, to feel confident in their abilities to properly conduct assessment of advising, and have more information about what similar universities are doing to assess advising (26.9%). While the main, perceived, administration elements important in supporting advisor assessment included: to provide staff more time for assessment of advising (25%), to provide more support for the assessment of advising (23.1%), to require more lecturers/support staff involvement in assessment of advising and to use assessment information to make decisions and changes (21.2%). The one main, perceived, advisee element important in supporting advisor assessment included: advisees need to be more willing to participate in assessment of advising (23.1%). Whereas, respondents indicated the most neutral view of the element: advisors need to be rewarded for assessment of advising activities (13.5%), and interestingly, revealed the view that advisors need to enjoy the assessment of advising process as the most unimportant element supporting the assessment of advising (3.8%) (Powers, 2012, p. 30).

Summary

The intention of this quantitative, descriptive, non-experimental research was to examine the advising practices (identify SLOs, assessment method(s) applied, and utilize assessment data) of one U.K. university. This chapter examined the analyses of the four research questions through descriptive statistics.

Research question one, guided by twenty-six predefined advising SLOs,

examined which advising student learning outcomes were identified at the U.K. university. Identifying SLOs is the first of three steps modeling "best practices" in regards to the "effect of … advising on student learning" (Powers, 2012, p. v).

The results for the advising cognitive SLOs data revealed that a students' knowledge of program/college policies was the most identified cognitive student learning outcome (32.7%), while a students' knowledge of calculating their GPA was the least identified cognitive learning outcome (7.7%). The results for the advising behavioral SLOs data indicated that a student's ability to build long-term plans to meet their educational and career goals was the most identified behavioral student learning outcome (27.0%), while a student's ability to translate a degree audit record for educational planning was the least identified (2.0%). The results for the advising affective SLOs data disclosed that a student values the role of industrial placement as part of the undergraduate experience was the most identified affective student learning outcome (25.0%). While a student values how their personal and life goals are related, and a student appreciates how their career goals are reflective of their personal interests were both the least identified affective learning outcome (9.6%). An analysis summary for identification of advising SLOs is outlined in Table 14 (Powers, 2012, p. 28).

Research question two investigated the advising method(s) utilized to conduct assessment of advising SLOs, the five method options included: written exams, student work/portfolio rubric, advising session direct observation rubric, reflective essays rubric and surveys/questionnaires (Powers, 2012, p. 29).

The findings revealed the leading assessment methods slightly varied among cognitive, behavioral and affective SLOs. The leading assessment methods utilized for

cognitive SLOs were surveys/questionnaires and student work/portfolio rubrics, and for both behavioral and affective SLOs the leading assessment method was surveys/questionnaires. Results revealed that written exams were an assessment method least used among the cognitive, behavioral and affective SLOs (Powers, 2012). An analysis summary for assessment method(s) of advising SLOs is outlined in Table 15.

Research question three examined how advising assessment data were used for advising improvement(s), the eight options included: revise advising pedagogy, revise advising curriculum, revise SLO, revise process/delivery outcomes, evaluate individual advisors, lobby for new resources, fulfill administration assessment mandates and fulfill accrediting body assessment mandates (Powers, 2012, p. 30).

The results revealed the 3 leading assessment data uses for cognitive SLOs as: revising the advising process and delivery outcomes, the advising curriculum, and appraising advising unit/services for advising improvements. Similar to the cognitive results, data for behavioral SLOs also showed advising improvement uses as: revising the advising process and delivery outcomes, the advising curriculum, and appraising advising unit/services for advising improvements, with 2 other uses observed: revising advising pedagogy and to lobby for new resources for advising improvements. The results for affective SLOs data revealed 5 leading assessment data uses: revising advising pedagogy, revising advising process and delivery outcomes, revising advising curriculum, revising SLO, and to evaluate advising unit/services used for advising improvements (Powers, 2012, p. 30). An analysis summary for advising SLOs data use is outlined in Table 16.

Furthermore, when participants were asked to indicate from the following options: mission of the university, needs of the students on campus, identification of services advisers provide to students, delineated advising goals based on advising mission statement, delineated advising objectives based on advising mission, which options were used as a source to identify advising student learning outcomes; the respondents disclosed two categories equally (75%): the needs of the students on campus, and the identification of services advisers provide to students (question 89) (Powers, 2012, p. 30). These results suggest a focus on student's transition to higher education. Attachment theory, as Kurland and Siegel (2013) found can assist advisers in the development of SLOs through a better understanding of "the various factors that affect student success, especially at the critical time in which students enter college and experience a major life transition into adulthood" (p. 16).

Table 14

Summary: Advising Cognitive Learning Outcomes

Cognitive SLO	Identified		Methods	N	%	Data Use	N	%
	N	%						
1. Student knows their degree curricula requirements	16	30.8	1. We informally assess this SLO	6	11.5	1. Revise advising pedagogy	9	17.3
			2. Written Exams	4	7.7	2. Revise advising curriculum	9	17.3
			3. Rubric: student work/portfolio	11	21.2	3. Revise SLO	7	13.5
			4. Rubric: observation: adv session	8	15.4	4. Revise process/delivery outcomes	11	21.2
			5. Rubric: reflective essays	6	11.5	5. Evaluate individual advisors	6	11.5
			6. Surveys/questionnaires	9	17.3	6. Evaluate advising unit/services	4	7.7
						7. Lobby for new resources	4	7.7
						8. Admin. assessment mandates	5	9.6
						9. Accrediting assessment mandates	6	11.5
2. Student knows program/college policies	17	32.7	1. We informally assess this SLO	9	17.3	1. Revise advising pedagogy	6	11.5
			2. Written Exams	7	13.5	2. Revise advising curriculum	10	19.2
			3. Rubric: student work/portfolio	8	15.4	3. Revise SLO	9	17.3
			4. Rubric: observation: adv session	7	13.5	4. Revise process/delivery outcomes	8	15.4
			5. Rubric: reflective essays	7	13.5	5. Evaluate individual advisors	6	11.5
			6. Surveys/questionnaires	9	17.3	6. Evaluate advising unit/services	6	11.5
						7. Lobby for new resources	4	7.7
						8. Admin. assessment mandates	5	9.6
						9. Accrediting assessment mandates	6	11.5
3. Student knows about academic majors available	8	15.4	1. We informally assess this SLO	4	7.7	1. Revise advising pedagogy	4	7.7
			2. Written Exams	3	5.8	2. Revise advising curriculum	6	11.5
			3. Rubric: student work/portfolio	5	9.6	3. Revise SLO	4	7.7
			4. Rubric: observation: adv session	4	7.7	4. Revise process/delivery outcomes	4	7.7
			5. Rubric: reflective essays	5	9.6	5. Evaluate individual advisors	3	5.8
			6. Surveys/questionnaires	7	13.5	6. Evaluate advising unit/services	3	5.8
						7. Lobby for new resources	3	5.8
						8. Admin. assessment mandates	3	5.8
						9. Accrediting assessment mandates	3	5.8

Table 14—Continued

Cognitive SLO	Identified		Methods			Data Use		
	N	%		N	%		N	%
4. Student knows about careers associated with their program	16	30.8	1. We informally assess this SLO	7	13.5	1. Revise advising pedagogy	4	7.7
			2. Written Exams	1	1.9	2. Revise advising curriculum	9	17.3
			3. Rubric: student work/portfolio	3	5.8	3. Revise SLO	6	11.5
			4. Rubric: observation: adv session	2	3.8	4. Revise process/delivery outcomes	9	17.3
			5. Rubric: reflective essays	3	5.8	5. Evaluate individual advisors	3	5.8
			6. Surveys/questionnaires	11	21.2	6. Evaluate advising unit/services	5	9.6
						7. Lobby for new resources	2	3.8
						8. Admin. assessment mandates	3	5.8
						9. Accrediting assessment mandates	2	3.8
5. Student knows how to schedule advising appoint-ment	16	30.8	1. We informally assess this SLO	9	17.3	1. Revise advising pedagogy	6	11.5
			2. Written Exams	1	1.9	2. Revise advising curriculum	5	9.6
			3. Rubric: student work/portfolio	3	5.8	3. Revise SLO	5	9.6
			4. Rubric: observation: adv session	2	3.8	4. Revise process/delivery outcomes	7	13.5
			5. Rubric: reflective essays	2	3.8	5. Evaluate individual advisors	5	9.6
			6. Surveys/questionnaires	6	11.5	6. Evaluate advising unit/services	9	17.3
						7. Lobby for new resources	5	9.6
						8. Admin. assessment mandates	4	7.7
						9. Accrediting assessment mandates	3	5.8
6. Student knows how to calculate their GPA	4	7.7	1. We informally assess this SLO	3	5.8	1. Revise advising pedagogy	1	1.9
			2. Written Exams	1	1.9	2. Revise advising curriculum	1	1.9
			3. Rubric: student work/portfolio	1	1.9	3. Revise SLO	1	1.9
			4. Rubric: observation: adv session	1	1.9	4. Revise process/delivery outcomes	3	5.8
			5. Rubric: reflective essays	1	1.9	5. Evaluate individual advisors	1	1.9
			6. Surveys/questionnaires	2	3.8	6. Evaluate advising unit/services	0	0
						7. Lobby for new resources	0	0
						8. Admin. assessment mandates	1	1.9
						9. Accrediting assessment mandates	1	1.9

Table 14—Continued

	Identified		Methods			Data Use		
Cognitive SLO	N	%		N	%		N	%
7. Student knows where to locate resources on campus	15	28.8	1. We informally assess this SLO	7	13.5	1. Revise advising pedagogy	4	7.7
			2. Written Exams	2	3.8	2. Revise advising curriculum	4	7.7
			3. Rubric: student work/portfolio	2	3.8	3. Revise SLO	3	5.8
			4. Rubric: observation: adv session	2	3.8	4. Revise process/delivery outcomes	5	9.6
			5. Rubric: reflective essays	2	3.8	5. Evaluate individual advisors	2	3.8
			6. Surveys/questionnaires	8	15.4	6. Evaluate advising unit/services	6	11.5
						7. Lobby for new resources	5	9.6
						8. Admin. assessment mandates	4	7.7
						9. Accrediting assessment mandates	3	5.8

Table 15

Summary: Advising Behavioral Learning Outcomes

Behavioral SLO	Identified		Methods	Participants		Data	Participants	
	N	%		N	%		N	%
8. Student is able to demonstrate effective decision-making skills	9	17.3	1. We informally assess this SLO	3	5.8	1. Revise advising pedagogy	6	11.5
			2. Written Exams	5	9.6	2. Revise advising curriculum	6	11.5
			3. Rubric: student work/portfolio	6	11.5	3. Revise SLO	5	9.6
			4. Rubric: observation: adv session	5	9.6	4. Revise process/delivery outcomes	4	7.7
			5. Rubric: reflective essays	6	11.5	5. Evaluate individual advisors	3	5.8
			6. Surveys/questionnaires	7	13.5	6. Evaluate advising unit/services	4	7.7
						7. Lobby for new resources	4	7.7
						8. Admin. assessment mandates	5	9.6
						9. Accrediting assessment mandates	5	9.6
9. Student is able to develop long-term plans to meet educational and career goals	14	27.0	1. We informally assess this SLO	8	15.4	1. Revise advising pedagogy	3	5.8
			2. Written Exams	2	3.8	2. Revise advising curriculum	4	7.7
			3. Rubric: student work/portfolio	3	5.8	3. Revise SLO	2	3.8
			4. Rubric: observation: adv session	3	5.8	4. Revise process/delivery outcomes	8	15.4
			5. Rubric: reflective essays	4	7.7	5. Evaluate individual advisors	2	3.8
			6. Surveys/questionnaires	7	13.5	6. Evaluate advising unit/services	3	5.8
						7. Lobby for new resources	3	5.8
						8. Admin. assessment mandates	5	9.6
						9. Accrediting assessment mandates	4	7.7
10. Student uses an educational plan to manage progress toward degree completion	7	13.5	1. We informally assess this SLO	4	7.7	1. Revise advising pedagogy	1	1.9
			2. Written Exams	0	0	2. Revise advising curriculum	2	3.8
			3. Rubric: student work/portfolio	0	0	3. Revise SLO	2	3.8
			4. Rubric observation: adv session	0	0	4. Revise process/delivery outcomes	2	3.8
			5. Rubric: reflective essays	1	1.9	5. Evaluate individual advisors	2	3.8
			6. Surveys/questionnaires	1	1.9	6. Evaluate advising unit/services	1	1.9
						7. Lobby for new resources	2	3.8
						8. Admin. assessment mandates	2	3.8
						9. Accrediting assessment mandates	2	3.8

Table 15—Continued

Behavioral SLO	Identified		Methods	Participants		Data	Participants	
	N	%		N	%		N	%
11. Student uses career plan to manage progress toward industrial placement(s)	10	19.2	1. We informally assess this SLO	6	11.5	1. Revise advising pedagogy	2	3.8
			2. Written Exams	3	5.8	2. Revise advising curriculum	5	9.6
			3. Rubric: student work/portfolio	2	3.8	3. Revise SLO	3	5.8
			4. Rubric: observation: adv session	3	5.8	4. Revise process/delivery outcomes	5	9.6
			5. Rubric: reflective essays	3	5.8	5. Evaluate individual advisors	0	0
			6. Surveys/questionnaires	7	13.5	6. Evaluate advising unit/services	4	1.9
						7. Lobby for new resources	3	5.8
						8. Admin. assessment mandates	4	7.7
						9. Accrediting assessment mandates	3	5.8
12. Student engages appropriate resources to meet needs for academic success	12	23.1	1. We informally assess this SLO	5	9.6	1. Revise advising pedagogy	3	5.8
			2. Written Exams	0	0	2. Revise advising curriculum	6	11.5
			3. Rubric: student work/portfolio	4	7.7	3. Revise SLO	3	5.8
			4. Rubric: observation: adv session	3	5.8	4. Revise process/delivery outcomes	6	11.5
			5. Rubric: reflective essays	2	3.8	5. Evaluate individual advisors	3	5.8
			6. Surveys/questionnaires	5	9.6	6. Evaluate advising unit/services	2	3.8
						7. Lobby for new resources	6	11.5
						8. Admin. assessment mandates	4	7.7
						9. Accrediting assessment mandates	3	5.8
13. Student engages appropriate resources to meet needs for industrial placement(s) success	10	19.2	1. We informally assess this SLO	5	9.6	1. Revise advising pedagogy	4	7.7
			2. Written Exams	0	0	2. Revise advising curriculum	5	9.6
			3. Rubric: student work/portfolio	4	7.7	3. Revise SLO	3	5.8
			4. Rubric: observation: adv session	3	5.8	4. Revise process/delivery outcomes	6	11.5
			5. Rubric: reflective essays	2	3.8	5. Evaluate individual advisors	3	5.8
			6. Surveys/questionnaires	5	9.6	6. Evaluate advising unit/services	4	7.7
						7. Lobby for new resources	5	9.6
						8. Admin. assessment mandates	3	5.8
						9. Accrediting assessment mandates	2	3.8

Table 15—Continued

Behavioral SLO	Identified N	%	Methods	Participants N	%	Data	Participants N	%
14. Student interprets a degree audit report for educational and career planning	1	2.0	1. We informally assess this SLO	0	0	1. Revise advising pedagogy	1	1.9
			2. Written Exams	0	0	2. Revise advising curriculum	1	1.9
			3. Rubric: student work/portfolio	0	0	3. Revise SLO	1	1.9
			4. Rubric: observation adv session	0	0	4. Revise process/delivery outcomes	0	0
			5. Rubric: reflective essays	0	0	5. Evaluate individual advisors	1	1.9
			6. Surveys/questionnaires	0	0	6. Evaluate advising unit/services	1	1.9
						7. Lobby for new resources	1	1.9
						8. Admin. assessment mandates	1	1.9
						9. Accrediting assessment mandates	1	1.9
15. Student uses online student portal for career/industrial placement planning	11	21.2	1. We informally assess this SLO	6	11.5	1. Revise advising pedagogy	1	1.9
			2. Written Exams	0	0	2. Revise advising curriculum	6	11.5
			3. Rubric: student work/portfolio	2	3.8	3. Revise SLO	5	9.6
			4. Rubric: observation: adv session	1	1.9	4. Revise process/delivery outcomes	5	9.6
			5. Rubric: reflective essays	2	3.8	5. Evaluate individual advisors	2	3.8
			6. Surveys/questionnaires	6	11.5	6. Evaluate advising unit/services	5	9.6
						7. Lobby for new resources	3	5.8
						8. Admin. assessment mandates	2	3.89
						9. Accrediting assessment mandates	1	1.9
16. Student prepares questions for an advising appointment	5	9.6	1. We informally assess this SLO	4	7.7	1. Revise advising pedagogy	1	1.9
			2. Written Exams	0	0	2. Revise advising curriculum	1	1.9
			3. Rubric: student work/portfolio	0	0	3. Revise SLO	1	1.9
			4. Rubric: observation: adv session	0	0	4. Revise process/delivery outcomes	2	3.8
							1	1.9
			5. Rubric: reflective essays	1	1.9	5. Evaluate individual advisors	2	3.8
			6. Surveys/questionnaires			6. Evaluate advising unit/services	1	1.9
						7. Lobby for new resources	3	5.8
						8. Admin. assessment mandates	2	3.8
						9. Accrediting assessment mandates		

Table 15—Continued

Behavioral SLO	Identified		Methods	Participants		Data	Participants	
	N	%		N	%		N	%
17. Student uses the online registration system, Canvas, to enroll in classes	8	15.4	1. We informally assess this SLO	3	5.8	1. Revise advising pedagogy	0	0
			2. Written Exams	0	0	2. Revise advising curriculum	1	1.9
			3. Rubric: student work/portfolio	1	1.9	3. Revise SLO	0	0
			4. Rubric: observation: adv session	0	0	4. Revise process/delivery outcomes	2	3.8
			5. Rubric: reflective essays	1	1.9	5. Evaluate individual advisors	1	1.9
			6. Surveys/questionnaires	1	1.9	6. Evaluate advising unit/services	3	5.8
						7. Lobby for new resources	1	1.9
						8. Admin. assessment mandates	0	0
						9. Accrediting assessment mandates	0	0
18. Student accesses advising in a timely manner	5	9.6	1. We informally assess this SLO	3	5.8	1. Revise advising pedagogy	0	0
			2. Written Exams	0	0	2. Revise advising curriculum	0	0
			3. Rubric: student work/portfolio	0	0	3. Revise SLO	0	0
			4. Rubric: observation: adv session	0	0	4. Revise process/delivery outcomes	2	3.8
			5. Rubric: reflective essays	0	0	5. Evaluate individual advisors	1	1.9
			6. Surveys/questionnaires	2	3.8	6. Evaluate advising unit/services	2	3.8
						7. Lobby for new resources	1	1.9
						8. Admin. assessment mandates	0	0
						9. Accrediting assessment mandates	0	0
19. Student appreciates how personal values relate to life goals	5	9.6	1. We informally assess this SLO	3	5.8	1. Revise advising pedagogy	2	3.8
			2. Written Exams	0	0	2. Revise advising curriculum	3	5.8
			3. Rubric: student work/portfolio	0	0	3. Revise SLO	2	3.8
			4. Rubric: observation: adv session	0	0	4. Revise process/delivery outcomes	2	3.8
			5. Rubric: reflective essays	0	0	5. Evaluate individual advisors	1	1.9
			6. Surveys/questionnaires	2	3.8	6. Evaluate advising unit/services	2	3.8
						7. Lobby for new resources	1	1.9
						8. Admin. assessment mandates	1	1.9
						9. Accrediting assessment mandates	1	1.9

Table 16

Summary: Advising Affective Learning Outcomes

Affective SLO	Identified		Assessment Methods	Participants		Data	Participants	
	N	%		N	%		N	%
20. Student values how their academic major reflects personal interests	6	11.5	1. We informally assess this SLO	3	5.8	1. Revise advising pedagogy	3	5.8
			2. Written Exams	0	0	2. Revise advising curriculum	3	5.8
			3. Rubric: student work/portfolio	0	0	3. Revise SLO	2	3.8
			4. Rubric: observation: adv session	0	0	4. Revise process/delivery outcomes	2	3.8
			5. Rubric: reflective essays	1	1.9	5. Evaluate individual advisors	0	0
			6. Surveys/questionnaires	1	1.9	6. Evaluate advising unit/services	1	1.9
						7. Lobby for new resources	0	0
						8. Admin. assessment mandates	1	1.9
						9. Accrediting assessment mandates	1	1.9
21. Student appreciates how their career goals reflect personal interests	5	9.6	1. We informally assess this SLO	1	1.9	1. Revise advising pedagogy	2	3.8
			2. Written Exams	0	0	2. Revise advising curriculum	1	1.9
			3. Rubric: student work/portfolio	0	0	3. Revise SLO	1	1.9
			4. Rubric: direct observation: adv session	0	0	4. Revise process/delivery outcomes	1	1.9
			5. Rubric: reflective essays	0	0	5. Evaluate individual advisors	0	0
			6. Surveys/questionnaires	1	1.9	6. Evaluate advising unit/services	0	0
						7. Lobby for new resources	1	1.9
						8. Admin. assessment mandates	0	0
						9. Accrediting assessment mandates	0	0
22. Student appreciates sense of ownership educational and career	9	17.3	1. We informally assess this SLO	4	7.7	1. Revise advising pedagogy	2	3.8
			2. Written Exams	0	0	2. Revise advising curriculum	4	7.7
			3. Rubric: student work/portfolio	2	3.8	3. Revise SLO	4	7.7
			4. Rubric: direct observation: adv session	0	0	4. Revise process/delivery outcomes	2	3.8
			5. Rubric: reflective essays	2	3.8	5. Evaluate individual advisors	2	3.8
			6. Surveys/questionnaires	5	9.6	6. Evaluate advising unit/services	3	5.8

Table 16—Continued

Affective SLO	Identified		Assessment Methods	Participants		Data	Participants	
	N	%		N	%		N	%
22. placement experiences	9	17.3				7. Lobby for new resources	1	1.9
						8. Admin. assessment mandates	2	3.8
						9. Accrediting assessment mandates	1	1.9
23. Student appreciates how advising contributions to educational and career placement experiences	8	15.4	1. We informally assess this SLO	3	5.8	1. Revise advising pedagogy	2	3.8
			2. Written Exams	0	0	2. Revise advising curriculum	2	3.8
			3. Rubric: student work/portfolio	1	1.9	3. Revise SLO	3	5.8
			4. Rubric: direct observation: adv session	0	0	4. Revise process/delivery outcomes	2	3.8
			5. Rubric: reflective essays	1	1.9		1	1.9
			6. Surveys/questionnaires	3	5.8	5. Evaluate individual advisors	1	1.9
						6. Evaluate advising unit/services	1	1.9
						7. Lobby for new resources	1	1.9
						8. Admin. assessment mandates	0	0
						9. Accrediting assessment mandates		
24. Student appreciates the role of industrial placement as part undergraduate experiences	13	25.0	1. We informally assess this SLO	2	3.8	1. Revise advising pedagogy	3	5.8
			2. Written Exams	0	0	2. Revise advising curriculum	7	13.5
			3. Rubric: student work/portfolio	6	11.5	3. Revise SLO	5	9.6
			4. Rubric: observation: adv session	1	1.9	4. Revise process/delivery outcomes	4	7.7
			5. Rubric: reflective essays	4	7.7		3	5.8
			6. Surveys/questionnaires	9	17.3	5. Evaluate individual advisors	4	7.7
						6. Evaluate advising unit/services	1	1.9
						7. Lobby for new resources	4	7.7
						8. Admin. assessment mandates	3	5.8
						9. Accrediting assessment mandates		
25. Student appreciates benefits of university established industry	9	17.3	1. We informally assess this SLO	2	3.8	1. Revise advising pedagogy	3	5.8
			2. Written Exams	1	1.9	2. Revise advising curriculum	4	7.7
			3. Rubric: student work/portfolio	3	5.8	3. Revise SLO	3	5.8
			4. Rubric: observation: adv session	2	3.8	4. Revise process/delivery outcomes	6	11.5
			5. Rubric: reflective essays	2	3.8	5. Evaluate individual advisors	1	1.9
			6. Surveys/questionnaires	4	7.7	6. Evaluate advising unit/services	3	5.8

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Table 16—Continued

Affective SLO	Identified		Assessment Methods	Participants		Data	Participants	
	N	%		N	%		N	%
25. relationships	9	17.3				7. Lobby for new resources	2	3.8
						8. Admin. assessment mandates	2	3.8
						9. Accrediting assessment mandates	1	1.9
26. Student values importance of interacting with academic and career support staff	9	17.3	1. We informally assess this SLO	5	9.6	1. Revise advising pedagogy	1	1.9
			2. Written Exams	0	0	2. Revise advising curriculum	2	3.8
			3. Rubric: student work/portfolio	0	0	3. Revise SLO	1	1.9
			4. Rubric: observation: adv session	1	1.9	4. Revise process/delivery outcomes	1	1.9
			5. Rubric: reflective essays	0	0	5. Evaluate individual advisors	4	7.7
			6. Surveys/questionnaires	6	11.5	6. Evaluate advising unit/services	5	9.6
						7. Lobby for new resources	1	1.9
						8. Admin. assessment mandates	0	0
						9. Accrediting assessment mandates	0	0

The summary findings reported in tables 14, 15 and 16 disclosed that 5 of the 26 identified advising student learning outcomes were assessed, albeit informally, at the highest rates; 2 cognitive, 2 behavioral and 1 affective, and the collected assessed data for the 5 advising SLOs were used to improve advising accordingly: a) "to revise process/delivery outcomes" for (cognitive #1) "Student knows their degree curricula requirements" and (behavioral #9) "Student is able to develop long-term plans to meet educational and career goals"; b) "to revise advising curriculum" for (cognitive #2) "Student knows program/college policies", (behavioral #8) "Student is able to demonstrate effective decision-making skills"; and (affective #24) "Student appreciates the role of industrial placement as part undergraduate experiences" (Powers, 2012, pp. 28, 30). The 2 primary advising assessed data improvement use options: "revise process/delivery outcomes" and "revise advising curriculum" were represented in cognitive, behavioral and affective assessed SLOs (Powers, 2012, p. 30).

Finally, research question four investigated the elements viewed as supporting advising assessment practices. The percentages for the 15 elements viewed as important in supporting the assessment of advising ranged from a high of 28.8% to a low of 15.4%. The findings showed four primary elements advisors needed in particular: "to believe that advising assessment is a worthwhile endeavor" (28.8%), "to know how to conduct assessment of advising, to feel confident in their abilities to properly conduct assessment of advising, and have more information about what similar universities are doing to assess advising" (26.9%) and elements administrators needed in particular were: "to provide staff more time for assessment of advising" (25%), "to provide more support for the assessment of advising" (23.1%), and "to require more lecturers/support staff involvement in assessment of advising and to use assessment information to make

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decisions and changes" (21.2%) were each considered "important factors to support the assessment of advising" (Powers, 2012, p. 30). The one main advisee element perceived as important in supporting advisor assessment included: "advisees needed to be more willing to participate in assessment of advising" (23.1%). Whereas, respondents indicated the most neutral view that "advisors needed to be rewarded for assessment of advising activities" (13.5%), and interestingly, "advisors needed to enjoy the assessment of advising process" as the most unimportant element supporting the assessment of advising (3.8%) (Powers, 2012, p. 30).

A comprehensive summary of the study, recommendations for further study and a conclusion are highlighted in Chapter 5.

CHAPTER 5

DISCUSSION AND CONCLUSIONS

Introduction

This concluding chapter contains background information, an overview of the research problem, with findings and discussion. Conclusion, implications, and further research recommendations; influenced by the study, complete the chapter.

Background

The convergence of accountability, quality, technology and student mobility has higher education institutions worldwide transforming at an unaccustomed, and likely uncomfortable, rate of speed. Student success, no longer considered the latest "catch phrase", is at the center of this convergence. Higher education's focus on student success shifted to a holistic curricular and co-curricular imperative upon E. K. Wilson's assertion that student learning also occurs beyond the classroom (Kerr et al., 2017 ; Kuh, 1993; Kuh, 1995; McKinney et al., 2004; Ruben, 2001; Steffes, 2004). Advising, considered a "form" of teaching while partnering with students to clarify, plan and achieve their educational and career goals, can better respond to this global convergence through evidential advising assessment data that clearly describes advising's co-curricular effect on student learning and its' role in higher education's commitment to each student's success (Appleby, 2008; Crookston, 1972; Winston Jr. et al., 1982; Woodbury, 1999, p. 10).

Powers' 2012 U.S. tertiary advising assessment practices study underscored the

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lack of advising assessment research and the need to further examine the development and instruction of tertiary advising, an established co-curricular student learning experience, in regards to the "effect of … advising on student learning" of all students (Lyons, 2015; McCarthy, 2017; Powers, 2012, p. v). Understanding HEIs culture of advising assessment practices worldwide, or lack thereof, can proactively inform administrators, parents (that have become much more involved in tertiary decisions), along with current and future mobile college bound children, to better understand advising expectations and practices in light of today's abundance of tertiary options and record levels of student debt.

The Problem

As the world has flattened, the internationalization and quality education movement surrounding higher education worldwide has led to the accountability of all stakeholders regarding student success in and beyond the classroom. Student mobility continues to impact tertiary enrollments as families and students consider the wealth of traditional and non-traditional enrollment alternatives along with prospective lower tertiary debt options. Although assessment, an accountability tool, in co-curricular areas such as advising has been overlooked by leaders, advising is not resistant to accountability consequences. The problem is that assessment of advising, if performed, is oftentimes implemented informally, without clear instructions or defined measures.

Summary of Findings

The following summarizes the major findings obtained from the participant responses to the four research questions (n = 52):

- The majority of the participants identified as academic advisers advising within a school/division and have been employed in a staff position with less than 5 years at the university. Although a career focused university, it was striking that only 1 participant (2%) specifically identified as a careers adviser and 14 (27%) identified as having both an academic and careers advising role. Although an attempt was made with this research to better understand careers advising practices, the professional careers advisers at this university were not well represented within the responses and many of the respondents indicated responsibilities for both academic and careers advising, perhaps unintentionally combining career into academic responses. The challenge with U.K. university careers advisers having multiple responsibilities which can be directed at their qualifications to also be "guidance practitioners, and some possess other relevant qualifications, for example teaching or HR or have substantial experience in a recruitment role", thereby influencing knowledge regarding practices impacting student's career preparedness (Christie, 2016, p. 73). These data may also align with the perception that advisers need to believe that advising assessment is a "worthwhile endeavor" or are representative of those in their role less than 5 years (Powers, 2012, p. 30).

- The advising student learning outcomes identified with the highest frequency were represented within the cognitive learning outcomes representing what students should "know … as a result of advising", despite the defined behavioral (do) and affective (value) student learning outcomes being greater in number, 11 and 8

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respectively (Robbins & Zarges, 2011, p. 3). Since learning is a "hierarchy of objectives", then knowledge (cognition) represents the very foundation the hierarchy is built upon, which comports with the more frequent responses for identified cognitive versus behavioral and affective advising learning outcomes responses (Muehleck, Smith, & Allen, 2014, p. 64). Furthermore, with the majority of respondents in their role less than 5 years, behavioral and affective outcomes may not have been chosen at the rate of cognitive learning outcomes due to the need for time to build a trusting advising partnership and potentially the need for training, to better understand "in conjunction with student development", the importance of "student characteristics" in the more contemporary, holistic advising paradigm (McDonald, 2019, p. 33).

- Surveys/questionnaires, indirect measures of learning, were the advising assessment method identified among the five assessment method choices with the highest frequency; cognitive (n = 52), behavioral (n = 42) and affective (n = 30). Respondents revealed that the majority, 96% (25 of the 26) of the learning outcomes were assessed informally. Moreover, the overall response rate for the affective SLO method(s) question was much lower than cognitive and behavioral method responses, with many options receiving zero responses as judging what students have learned to value could have been more challenging for the respondents. The least identified advising assessment method identified for the majority of advising learning outcomes was written exams (Tables 7, 8, 9). The discovery that both written exams and rubrics were assessment methods not utilized as often shows an opportunity, within the assertion that advising is a manner of teaching, to collaborate with curricular colleagues in understanding and adopting "traditional written exam" design with "standards-based", "non-exam" supported

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advising assessment, along with a need for advisers and advisees to understand the consequence(s), if any, of passing or failing; if the decision to implement occurs (Hylton & Diefes-Dux, 2016, p. 4). Although surveys are seen as a cost-effective and timely method, research continues to show that data fatigue and survey fatigue are real symptoms impacting assessment.

- Results based on the 9 advising assessment data use options for the 26 advising learning outcomes revealed two were primarily used for advising improvements that focused on processes and delivery of practices, and advising curriculum revisions (Tables 7, 8, 9). These choices relate more directly to the daily operations of the advising partnership and supports the perception of the importance of assessment information required to better inform decisions regarding efficient uses of institutional advising resources and design of the "official … and the unofficial" advising curriculum impacting student's progress toward degree completion (Harding-DeKam, Hamilton, & Loyd, 2012, p. 6). Fulfilling assessment mandates of university accrediting body was the least reported data use option for improving and supporting advising assessment across the majority of learning outcomes, which aligns with the actuality that both U.S. and U.K. accrediting bodies focus on institutional standards and quality as a whole and some personnel would view this as requiring the attention of administration rather than the foot soldiers implementing the work.

- Participants rated 15 elements considered to improve and support advising assessment depicted within advisers, administrators and advisee situations. The message that advising assessment work is important and is valued begins and ends with administration, however confidence in assessment abilities ultimately lies with the

adviser and can be attained through professional development, professional associations, workshops and knowledge dissemination. Advisee involvement in assessment can only strengthen advising process delivery and curriculum revisions by incorporating their feedback into improvements. However, communicating to the students the impact their feedback had on overall improvements would foster an understanding of the importance of their participation and close the feedback loop. These findings support the premise that support of administration and the involvement of all key stakeholders are important factors in the success of any initiative (Tinto & Pusser, 2006).

Discussion

This study was guided by three main assertions, that advising is a "form of teaching", that learning occurs beyond the classroom, and that student mobility has altered "the higher education landscape worldwide", within the framework of advising assessment practices, to better understand the inter-relatedness of these assertions and their impact on the contemporary advising paradigm relating to student success (Gürüz, 2011, p. 19; Wilson, 1966; Woodbury, 1999, p. 10). The findings of this study, albeit representing one European HEI, corresponded with Powers (2012) assertions that assessment, if performed, is "often minimal, narrow, and inconsistent" (p. 2).

The data revealed that the university did identify advising student learning outcomes, with a cognitive emphasis on students being aware of policies and degree requirements, a behavioral emphasis on the ability to create long-term plans influenced by their goals and engaging with those supportive of their academic success; and an affective emphasis on valuing the impact of their undergraduate industrial placement

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which distinctly aligns with the vocational focus of the university. The revelation that the professional participants in this cross-cultural study and the 2012 U.S. study identified cognitive more frequently than behavioral or affective student learning outcomes could be consistent with, as Powers (2012) asserted, the "traditional advising paradigms" of prescriptive (informational) advising; the very foundation of an advising partnership (p. 68). However, the advising paradigm has evolved beyond the criterion of prescriptive advising practices to include developmental proficiencies due, in part, to the intensified student success expectations of internal and external HEI stakeholders.

Although curricular learning outcomes are more developmentally familiar and established in higher education, the opposite is true for co-curricular learning outcomes. Perhaps when the advising assessment culture is developed, becomes intentional and is supported by HEI stakeholders more consistently, advising co-curricular learning outcomes will become as familiar and established as currently assessed curricular outcomes by those stakeholders responsible for, and benefiting from, a contemporary advising paradigm.

The data revealed that the university did utilize multiple advising assessment methods for 25 of the 26 SLOs (96%), with an emphasis on: surveys and questionnaires, and rubrics to measure portfolio work. The (affective) advising learning outcome "student interprets a degree audit report for educational and career planning" did not report the utilization of any assessment methods, perhaps the university's course registration technology system does not have degree audit capability or the students prefer working directly with their academic or careers advisors for their educational and career planning. Additionally, the majority of respondents noted that all advising SLOs were informally

assessed, supporting the claims by Powers (2012), Klahn (1990), and Upcraft and Schuh (2002) that performing assessment is often inconsistent and unsophisticated.

The use of surveys/questionnaires as the primary advising SLO assessment method for both the U.S. and U. K. studies suggests survey familiarity to those participating and to those administering survey research. Although Christ (2013) observed that this is a period of relentless collection of data, Creswell (2012) points to survey's revolutionary impact on "the use and applications of research" leading to dissemination (p. 377). Statistically speaking, if surveys are relentlessly used for data collection it follows that it would be the most frequently represented, and familiar, assessment method.

The data revealed that the university did utilize the advising assessment data to improve advising assessment practices with an emphasis on improving processes, delivery of practices, and advising curriculum. Improvements that are reflective of the advising process/delivery, inclusive of a mobile student body, are complex, dynamic and continuously evolving (Folsom et al., 2015). Robust advising processes build a strong foundation, robust advising delivery builds strong trust while a robust advising curriculum builds strong knowledge acquisition in the "teacher—learner" on-going partnership (Chaaraoui, 2019, p. 10).

The perceptions of the university respondents regarding elements viewed as improving and supporting advising assessment revealed a primary emphasis on the need for administration and other stakeholders to advance the importance of advising assessment efforts (Yonker, Hebreard, & Cawley, 2019). This can be achieved by enculturating advising assessment practices into the higher education community through

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the implementation of strategies that cultivate collaboration and partnerships despite existing silos, assessment training and up-skilling, effective and consistent communications, and realistic advising assessment expectations aligned with the institution's strategic activities and planning efforts towards student learning and success.

An additional limitation was presented upon completion of this study in the attainment of a lower than expected response rate. There is, as postulated by Groves (2006), "little empirical support" for the concept that low response rates necessarily "produce estimates with high nonresponse bias" because "survey variables and response propensities are highly variable across items within a survey, survey conditions, and populations" that participate in the survey (p. 670; Lavrakas, 2008). The sample population, with the majority in their advising roles for less than 5 years, may need more time in their role to better calibrate their confidence in ascertaining and analyzing the student's perspective of what they know, do and value. Additionally, the survey used for this research differed slightly from the 2012 U.S. advising assessment study by including career (industrial placement) advising questions due to the vocational curriculum focus at the participating university; thereby increasing the number of questions from 79 to 93. These factors may have impacted the limited response rates.

It is also noteworthy that this advising assessment practices research was focused on professional adviser's feedback, and not to produce an additional advising student satisfaction study.

Conclusion

Although limited, the responses of the advising professionals that participated in this seminal cross-cultural study assisted in a general understanding of the advising assessment practices of the participating U.K. university. The results obtained in this study would suggest that the university informally exercised the initiatives acknowledged as best practices in "measuring the effect" of co-curricular "advising on student learning" through identifying SLOs, utilizing assessment method(s) and applying assessment data to improve advising practices (Powers, 2012, p. v). In fact, approximately 85% of respondents indicated that the majority of the learning outcomes were informally assessed. This would imply an opportunity, and possible existing support, to implement a formal advising assessment culture guided by elements such as those framed in Banta's esteemed curricular Culture of Evidence (CoE) model. The data also suggested the perception that advisors need to believe that assessment is valuable work and administrators need to provide more support to sustain and improve advising assessment practices. This would suggest a need for an internal strengths, weaknesses, opportunities and threats (SWOT) analysis of the institution's current commitment from administration in support of advising assessment practices. A SWOT analysis, according to Hladchenko (2014), provides administrators with "different points of view on the environment and organization and define[s] the most crucial factors" concerning advising practices (p. 54).

Assessment, as Christ (2013) emphasizes, is "here to stay" and when translated to advising; a knowledgeable institutional and academic affairs partner, will assist in the culture transformation through planning, implementing, evaluating and improving advising applications that formally, effectively and evidentially inform practices while

addressing accountability to internal and external stakeholders regarding student success in a more holistic manner across geographical boundaries (p. 6).

Shifts in student mobility and traditional advising practices are influencing higher education's transformation through evidence of standards and quality. Officially implemented co-curricular advising assessment practices are one of many tertiary factors that can answer the increasingly louder accountability drumbeat that is focused on student success of all students. With overall student recruitment, retention and completion rates continuing to plague higher education institutions worldwide, the examination of advising assessment practices; in a discipline that has evolved with time, provides a more holistic understanding of native and non-native student success. This examination is as important and relevant today as ever before.

Implications for Practice

The findings of this study describe an informal approach to advising assessment practices compelling the belief that advising assessment is not a worthwhile endeavor at the participating U. K. university. The following are recommendations for university stakeholders based on the results of this study.

1. The administrators should evaluate the kind of support their over 30% of non-native, mobile students require "to embed global citizenship into the … student experience" and all advising practices to assure the inclusion of cultural traditions, customs, values, and jargon into their teachings and institute policies for alignment (American Council on Education, 2017; Labi, 2010, p. 1).

2.   If the university has an institutional assessment office, the university officials should consider appointing an advising liaison, or hiring an advising professional, proficient in assessment as a member of that team. This member could then contribute, based on their training and expertise, to a more holistic understanding of student success inclusive of co-curricular learning outcomes. This team member could elevate co-curricular assessment throughout the institution, as a foot-soldier, through presentations, communications, workshops and conference presentations.

3.   The institutional administrators should consider a self-reflection plan such as performing a strengths, weaknesses, opportunities and threat (SWOT) strategic analysis of the institution's current commitment of resources that support advising assessment practices. A SWOT analysis must include the participation of key university stakeholders and as Hladchenko (2014) asserts, once completed "strategies are developed which may build on the strengths, eliminate the weaknesses, exploit the opportunities or counter the threats", to be an informative and productive exercise (p. 51).

4.   The administrators should consider formally implementing a culture evidence for academic and careers advising practices which would require the creation, or revision of, current practices and policies, advising mission, vision and strategic goals aligned with the university's mission, vision and strategic goals. Making these prominent within university communications would give advising assessment practices credibility within the institutional culture.

Recommendations for Further Study

The following are recommended areas of further research influenced by the results of this study:

1. Although it was not the objective to generalize the results of this study, a replicated study should be conducted to include advising professionals employed at multiple European HEIs, starting with top ranked mobile student destinations. Recent research performed by the Institute of International Education (IIE) (2018) found "the United States, Canada, Australia, and New Zealand host approximately 40 percent of all globally mobile students", impacting HEI communities (p. 11). This will better assist families and students considering mobility options in understanding tertiary advising practices, and HEI administrators to have a deeper analysis of commonalities and differences in advising assessment practices and address strengths and weaknesses, particularly those impacting students that have traveled out of their home country.

2. Consideration for multiple (or multiphase), shorter surveys is recommended for any future advising assessment practices research. Possibly separating surveys into the 3 advising learning outcomes areas: cognitive, behavioral and affective; to address response rates.

3. A replicated study should be conducted with a larger population of professional advisers, possibly stratified to the specific characteristic of having more time in their advising role. The majority of respondents for this study reported less than 5 years of experience. More experienced personnel are apt to complete a survey (Fulton, 2018).

4. With a focus on the career preparation attribute of student success, future studies dedicated to career advising professionals employed at polytechnical universities in the

U.S. and abroad should be performed, with the intention of better understanding the effect of career advising on student learning, development and up-skilling. This will better assist families and students in a more global understanding of tertiary career preparation and practices, and HEI administrators to have a deeper analysis of commonalities and differences within career advising assessment practices.

5.   A future mixed-methods advising assessment study is recommended. Although this replicated survey offered limited fill-in options, if answered, those questions did not contribute to a richer analysis of advising assessment practices that supplemental information from focus groups and interviews would have offered. While considered time consuming, according to Creswell (2012), this method has "become popular … in research methods" by providing more complexity to data (p. 534).

6.   A future study obtaining the perspective of native and non-native student advisees regarding the effect of advising on their learning performed simultaneously with professional advisers at the same university is recommended. Understanding where student and adviser perspectives align and deviate would assist stakeholders in gaining a deeper knowledge of existing advising assessment practices. As noted earlier, the path of an advisee's educational journey from dependency to autonomy is not linear, the 26 advising learning outcomes may need to be adjusted or revised based on obtained results.

APPENDIX A

SURVEY PERMISSION

From: Powers, Keith <kpowers2@usi.edu>
Sent: Wednesday, April 22, 2015 9:32 AM
To: Catherine Mahrt-Washington
Subject: RE: USI Email Form

Hi Catherine,

You are more than welcome to use the survey. I look forward to learning of your finding.
Best wishes on your endeavor.
Keith

From: cewsse@rit.edu [mailto:cewsse@rit.edu]
Sent: Tuesday, April 21, 2015 7:01 PM
To: Powers, Keith
Subject: USI Email Form

Email From Website

Intended for:	Keith Powers (kpowers2@usi.edu)
Submitted:	4/21/2015 7:01:06 PM
From Page:	Advising Center Staff
Page Path:	http://www.usi.edu/science/advisingcenter/staff
Name:	Catherine Mahrt-Washington
Email:	cewsse@rit.edu
Comment:	Hello Dr. Powers, I am currently enrolled in the Ph.D. in Higher Education Administration program at Andrew's University and beginning my dissertation phase. I'd like to replicate your 2012 research by studying another sample of higher education institutional academic advising personnel who are not NACADA members (a recommendation made in your dissertation). Please let me know if you have any questions. Best, Catherine.

APPENDIX B

SURVEY

Assessment of Academic and Careers Advising

Introduction

The purpose of the assessment survey is to learn: (a) what advising student learning outcomes are assessed by your university; (b) the measures used by your university to assess the student learning outcomes; (c) how the assessment information gathered is used by your university; and (d) your perceptions of this assessment.

Please answer the following questions regarding the assessment of advising at your university as accurately as possible.

Please recognize that by completing and returning this survey, you have given your informed consent to participate in the study, which has been approved by the Andrews University Institutional Review Board (IRB). If you do not consent, you can simply choose not to continue at this time. If you decide after beginning the survey that you do not wish to continue, you may abort at any time. You also may choose not to respond to a particular question for any reason. This survey allows you the ability to save your responses and continue at a later time. Confidentiality will be maintained, responses will be reported in the aggregate and will not identify individual people within the data analysis or result sections of the study.

This survey should take approximately 30 minutes to complete. Thank you for your participation! Should you have any questions prior to or during the study, you can contact the student investigator, Catherine Mahrt-Washington at <mahrtwas@andrews.edu> and put "Assessment Survey" in the subject line.

Your assistance with this important endeavor is very much appreciated!

Define

Your advising *role* will relate to careers advising or to academic advising. These roles are defined below.

Defining your advising *role*.
-A careers advising role requires that you (a) have job responsibilities associated with undergraduate industrial placement advising, and (b) that you are knowledgeable about the specifics of undergraduate industrial placement advising.

-An academic advising role requires that you (a) have job responsibilities associated with undergraduate programme advising, and (b) that you are knowledgeable about the specifics of undergraduate programme advising.

Please identify your advising role in question 1 and use this definition when responding to the remaining questions in this survey.

Your advising *situation* will relate to careers advising or to academic advising. These situations are defined below.

Defining your advising *situation*.
Your advising situation is the university level at which you (a) have job responsibilities associated with undergraduate advising, and (b) that you are knowledgeable about the specifics of undergraduate advising.

Please identify your advising situation in question 2 and use this definition when responding to questions about the assessment of advising.

For example:
If you answered that you have job responsibilities associated with undergraduate advising, and are knowledgeable about the specifics of undergraduate advising at the university level ... then answer the following questions about advising at the university level (university wide).

However:

If your undergraduate advising responsibilities and knowledge about undergraduate advising is at the department level then answer the remaining questions about advising within the school, department or division of the university.

Q1.

What is your advising role that entails (a) job responsibilities associated with undergraduate advising, and (b) that you are knowledgeable about the specifics of undergraduate advising? (**Reminder**: You will use your answer to this question to define **your advising role** for the remaining questions within the survey.

- ○ Career/industrial placement advisor
- ○ Academic/programme advisor
- ○ Both career and academic advisor
- ○ [   ] Other

Q2. What is your advising situation, at the university level, at which you (a) have job responsibilities associated with undergraduate advising, and (b) that you are knowledgeable about the specifics of undergraduate advising? (**Reminder**: You will use your answer to this question to define **your advising situation** for the remaining questions within the survey.

- ○ University wide (for the whole university)
- ○ School or division within the university
- ○ Department within the university
- ○ [   ] Other

Q3. Do you advise students as part of your responsibilities?

○ Yes
○ No

Q4. Who advises undergraduate students in **your advising situation**? (**select all that apply**).

☐ Full-time lecturers
☐ Part-time lecturers
☐ Full-time career advisors
☐ Part-time career advisors
☐ Full-time academic advisors
☐ Part-time academic advisors
☐ Graduate students
☐ Peer advisors
☐ Do not know
☐ [   ] Other

Q5. Is advising **mandatory** each academic term for all students in **your advising situation**?

○ No
○ Yes
○ It depends (provide specifics in the comments box)

○ Do not know

Q6.
Is there a formal mission statement for advising in **your advising situation**?

○ No
○ Yes
○ Do not know

Q7.
Student Learning Outcomes (SLOs) articulate what students are expected to know, do, and appreciate as a result of involvement in the advising experience.

Please select one of the following that best describes the current state of assessment of learning outcomes in **your advising situation**.

○ We have not identified any advising student learning outcomes and we do not assess advising outcomes

○ We have not identified any advising student learning outcomes but we assess advising outcomes

○ We are in the process of identifying our advising student learning outcomes but we do not assess advising outcomes

○ We are in the process of identifying advising student learning outcomes and we assess advising outcomes

○ We have identified advising student learning outcomes but we do not assess advising outcomes

○ We have identified advising student learning outcomes and we assess advising outcomes

Cognitive SLO 1

Q8. Is the following, or something similar, a **formally identified** advising student learning outcome (SLO) *in **your advising situation**?*

"Student knows the degree curricula requirements of the college/department"

◯ No
◯ Yes
◯ Do not know

.

```
Fill this out only if you answered:

*Yes on question 8. Is the following, or something similar, a formally identified advising
student learning outcome in your advising situation?

Measures and use of information for SLO 1 "Student knows the degree curricula
requirements of the college/department"

For all other responses please move to question 11.
```

Q9.
Which of the following **methods** do you use to **assess** the student learning outcome *"Student knows the degree curricula requirements of the college/department*?" (**Select all that apply**)

☐ We do not formally assess this student learning outcome
☐ We informally assess this student learning outcome (e.g., talking with student in advising session)
☐ Written exams

☐ Rubric to assess student work/portfolio
☐ Rubric to assess direct observation of student in advising session
☐ Rubric to assess reflective essays
☐ Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)
☐ Do not know
☐ [   ] Other

Q10.

How do you **use the information** gathered from assessing the student learning outcome *"Student knows the degree curricula requirements of the college/department?"* (**Select all that apply**)

☐ We do not use the assessment information gathered
☐ Revise advising pedagogy
☐ Revise advising curriculum
☐ Revise student learning outcomes
☐ Revise process/delivery outcomes
☐ Evaluate individual advisors
☐ Evaluate the advising unit and services
☐ Lobby for new resources based on assessment results
☐ Fulfill assessment mandates of university administration
☐ Fulfill assessment mandates of university accrediting body
☐ Do not know
☐ [   ] Other

SLO 2

Q11. Is the following, or something similar, a **formally identified** advising student learning outcome in *your advising situation?*

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"Student knows programme/college policies (e.g., student progression, industrial placements, plagiarism, course changes)"

◯ No
◯ Yes
◯ Do not know
.

Fill this out only if you answered:

*Yes on question 11. Is the following, or something similar, a **formally** **identified** advising student learning outcome in **your advising situation**?*

Measures and use of information for SLO 2 "Student knows programme/college policies (e.g., student progression, industrial placements, plagiarism, course changes)*"*

For all other responses please move to question 14.

Q12.
Which of the following **methods** do you use to **assess** the student learning outcome "Student knows programme/college policies (e.g., student progression, industrial placements, plagiarism, course changes)?" (**Select all that apply**)

☐ We do not formally assess this student learning outcome
☐ We informally assess this student learning outcome (e.g., talking with student in advising session)
☐ Written exams

☐ Rubric to assess student work/portfolio

☐ Rubric to assess direct observation of student in advising session

☐ Rubric to assess reflective essays

☐ Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)

☐ Do not know

☐ [_____] Other

Q13.

How do you **use the information** gathered from assessing the student learning outcome "Student knows programme/college policies (e.g., student progression, industrial placements, plagiarism, course changes)?" (**Select all that apply**)

☐ We do not use the assessment information gathered

☐ Revise advising pedagogy

☐ Revise advising curriculum

☐ Revise student learning outcomes

☐ Revise process/delivery outcomes

☐ Evaluate individual advisors

☐ Evaluate the advising unit and services

☐ Lobby for new resources based on assessment results

☐ Fulfill assessment mandates of university administration

☐ Fulfill assessment mandates of university accrediting body

☐ Do not know

☐ [_____] Other

SLO 3

Q14.

Is the following, or something similar, a **formally identified** advising student learning outcome in **your advising situation**?

"Student knows about academic majors available"

◯ No
◯ Yes
◯ Do not know

.

Fill this out only if you answered:

*Yes on question 14. Is the following, or something similar, a **formally** **identified** advising student learning outcome *in **your advising situation***?

Measures and use of information for SLO 3 "Student knows about academic majors available*"*

For all other responses please move to question 17.

Q15.

Which of the following **methods** do you use to **assess** the student learning outcome "Student knows about academic majors available?" (**Select all that apply**)

☐ We do not formally assess this student learning outcome

☐ We informally assess this student learning outcome (e.g., talking with student in advising session)

☐ Written exams

☐ Rubric to assess student work/portfolio

☐ Rubric to assess direct observation of student in advising session

☐ Rubric to assess reflective essays

☐ Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)

☐ Do not know

☐ [   ] Other

Q16.

How do you **use the information** gathered from assessing the student learning outcome "Student knows about academic majors available?" (**Select all that apply**)

☐ We do not use the assessment information gathered

☐ Revise advising pedagogy

☐ Revise advising curriculum

☐ Revise student learning outcomes

☐ Revise process/delivery outcomes

☐ Evaluate individual advisors

☐ Evaluate the advising unit and services

☐ Lobby for new resources based on assessment results

☐ Fulfill assessment mandates of university administration

☐ Fulfill assessment mandates of university accrediting body

☐ Do not know

☐ [   ] Other

SLO 4

Q17.

Is the following, or something similar, a **formally identified** advising student learning outcome in **your advising situation**?

"Student knows about careers associated with their degree"

○ No
○ Yes
○ Do not know
.

Fill this out only if you answered:

*Yes on question 17. Is the following, or something similar, a **formally** identified advising student learning outcome *in **your advising situation***?

Measures and use of information for SLO 4 "Student knows about careers associated with their degree"

For all other responses please move to question 20.

Q18.
Which of the following **methods** do you use to **assess** the student learning outcome "Student knows about careers associated with their degree?" (**Select all that apply**)

☐ We do not formally assess this student learning outcome
☐ We informally assess this student learning outcome (e.g., talking with student in advising session)
☐ Written exams
☐ Rubric to assess student work/portfolio
☐ Rubric to assess direct observation of student in advising session
☐ Rubric to assess reflective essays

☐ Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)

☐ Do not know

☐ [   ] Other

Q19.

How do you **use the information** gathered from assessing the student learning outcome "Student knows about careers associated with their degree?" (**Select all that apply**)

☐ We do not use the assessment information gathered

☐ Revise advising pedagogy

☐ Revise advising curriculum

☐ Revise student learning outcomes

☐ Revise process/delivery outcomes

☐ Evaluate individual advisors

☐ Evaluate the advising unit and services

☐ Lobby for new resources based on assessment results

☐ Fulfill assessment mandates of university administration

☐ Fulfill assessment mandates of university accrediting body

☐ Do not know

☐ [   ] Other

SLO 5

Q20.

Is the following, or something similar, a **formally identified** advising student learning outcome in **your advising situation**?

"Student knows how to schedule an advising appointment"

○ No
○ Yes
○ Do not know
.

┌───┐
│   │
│   Fill this out only if you answered: │
│   │
│ *Yes on question 20. Is the following, or something similar, a **formally** **identified** advising │
│   student learning outcome *in **your advising situation***?   │
│   │
│   Measures and use of information for SLO 5 "Student knows how to schedule an advising │
│   appointment"   │
│   │
│ For all other responses please move to question 23.   │
│   │
└───┘

Q21.

Which of the following **methods** do you use to **assess** the student learning outcome "Student knows how to schedule an advising appointment?" (**Select all that apply**)

☐ We do not formally assess this student learning outcome

☐ We informally assess this student learning outcome (e.g., talking with student in advising session)

☐ Written exams

☐ Rubric to assess student work/portfolio

☐ Rubric to assess direct observation of student in advising session

☐ Rubric to assess reflective essays

☐ Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)

☐ Do not know

☐ [   ] Other

Q22.

How do you **use the information** gathered from assessing the student learning outcome "Student knows how to schedule an advising appointment?" (**Select all that apply**)

☐ We do not use the assessment information gathered
☐ Revise advising pedagogy
☐ Revise advising curriculum
☐ Revise student learning outcomes
☐ Revise process/delivery outcomes
☐ Evaluate individual advisors
☐ Evaluate the advising unit and services
☐ Lobby for new resources based on assessment results
☐ Fulfill assessment mandates of university administration
☐ Fulfill assessment mandates of university accrediting body
☐ Do not know
☐ [   ] Other

SLO 6

Q23.

Is the following, or something similar, a **formally identified** advising student learning outcome in **your advising situation**?

"Student knows how to calculate his/her GPA"

○ No

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○ Yes
○ Do not know

.

Fill this out only if you answered:

*Yes on question 23. Is the following, or something similar, a **formally** **identified** advising student learning outcome *in **your advising situation**?*

Measures and use of information for SLO 6 "Student knows how to calculate his/her GPA"

For all other responses please move to question 26.

Q24.

Which of the following **methods** do you use to **assess** the student learning outcome "Student knows how to calculate his/her GPA?" (**Select all that apply**)

☐ We do not formally assess this student learning outcome
☐ We informally assess this student learning outcome (e.g., talking with student in advising session)
☐ Written exams
☐ Rubric to assess student work/portfolio
☐ Rubric to assess direct observation of student in advising session
☐ Rubric to assess reflective essays
☐ Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)
☐ Do not know
☐ [   ] Other

Q25.

How do you **use the information** gathered from assessing the student learning outcome "Student knows how to calculate his/her GPA?" (**Select all that apply**)

- [ ] We do not use the assessment information gathered
- [ ] Revise advising pedagogy
- [ ] Revise advising curriculum
- [ ] Revise student learning outcomes
- [ ] Revise process/delivery outcomes
- [ ] Evaluate individual advisors
- [ ] Evaluate the advising unit and services
- [ ] Lobby for new resources based on assessment results
- [ ] Fulfill assessment mandates of university administration
- [ ] Fulfill assessment mandates of university accrediting body
- [ ] Do not know
- [ ] [   ] Other

SLO 7

Q26.

Is the following, *or something similar, a **formally identified** advising student learning outcome in **your advising situation**?*

"Student knows where to locate resources on campus (e.g., tutoring, career services, financial assistance, specialised accomodations)"

- ( ) No
- ( ) Yes
- ( ) Do not know

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.

> Fill this out only if you answered:
>
> *Yes on question 26. Is the following, or something similar, a **formally** **identified** advising student learning outcome *in **your advising situation***?
>
> Measures and use of information for SLO 7 "Student knows where to locate resources on campus (e.g., tutoring, career services, financial assistance, specialised accomodations)"
>
> For all other responses please move to question 29.

Q27.

Which of the following **methods** do you use to **assess** the student learning outcome "Student knows where to locate resources on campus (e.g., tutoring, career services, financial assistance, specialised accommodations)?" (**Select all that apply**)

☐ We do not formally assess this student learning outcome

☐ We informally assess this student learning outcome (e.g., talking with student in advising session)

☐ Written exams

☐ Rubric to assess student work/portfolio

☐ Rubric to assess direct observation of student in advising session

☐ Rubric to assess reflective essays

☐ Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)

☐ Do not know

☐ [   ] Other

Q28.

How do you **use the information** gathered from assessing the student learning outcome "Student knows where to locate resources on campus (e.g., tutoring, career services, financial assistance, specialised accommodations)?" (**Select all that apply**)

- ☐ We do not use the assessment information gathered
- ☐ Revise advising pedagogy
- ☐ Revise advising curriculum
- ☐ Revise student learning outcomes
- ☐ Revise process/delivery outcomes
- ☐ Evaluate individual advisors
- ☐ Evaluate the advising unit and services
- ☐ Lobby for new resources based on assessment results
- ☐ Fulfill assessment mandates of university administration
- ☐ Fulfill assessment mandates of university accrediting body
- ☐ Do not know
- ☐ [   ] Other

Behavioral SLO 8

Q29.

Is the following, or something similar, a **formally identified** advising student learning outcome in **your advising situation**?

"Student is able to demonstrate effective decision-making skills"

- ○ No
- ○ Yes
- ○ Do not know

.

```
┌─────────────────────────────────────────────────────────────────────┐
│                    Fill this out only if you answered:                │
│                                                                       │
│  *Yes on question 29. Is the following, or something similar, a       │
│  formally identified advising student learning outcome in your        │
│                      advising situation?                              │
│                                                                       │
│   Measures and use of information for SLO 8 "Student is able to       │
│         demonstrate effective decision-making skills"                 │
│                                                                       │
│  For all other responses please move to question 32.                  │
└─────────────────────────────────────────────────────────────────────┘
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Q30.

Which of the following **methods** do you use to **assess** the student learning outcome "Student is able to demonstrate effective decision-making skills?" (**Select all that apply**)

☐ We do not formally assess this student learning outcome

☐ We informally assess this student learning outcome (e.g., talking with student in advising session)

☐ Written exams

☐ Rubric to assess student work/portfolio

☐ Rubric to assess direct observation of student in advising session

☐ Rubric to assess reflective essays

☐ Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)

☐ Do not know

☐ [   ] Other

Q31.

How do you **use the information** gathered from assessing the student learning outcome

"Student is able to demonstrate effective decision-making skills?" (**Select all that apply**)

- [ ] We do not use the assessment information gathered
- [ ] Revise advising pedagogy
- [ ] Revise advising curriculum
- [ ] Revise student learning outcomes
- [ ] Revise process/delivery outcomes
- [ ] Evaluate individual advisors
- [ ] Evaluate the advising unit and services
- [ ] Lobby for new resources based on assessment results
- [ ] Fulfill assessment mandates of university administration
- [ ] Fulfill assessment mandates of university accrediting body
- [ ] Do not know
- [ ] [   ] Other

SLO 9

Q32.

Is the following, or something similar, a **formally identified** advising student learning outcome in **your advising situation**?

"Student is able to develop long-term plans to meet educational and career goals"

- ○ No
- ○ Yes
- ○ Do not know

.

| Fill this out only if you answered: |

*Yes on question 32. Is the following, or something similar, a **formally** **identified** advising student learning outcome *in **your advising situation**?*

Measures and use of information for SLO 9 "Student is able to develop long-term plans to meet educational and career goals"

For all other responses please move to question 35.

Q33.

Which of the following **methods** do you use to **assess** the student learning outcome "Student is able to develop long-term plans to meet educational and career goals?" (**Select all that apply**)

☐ We do not formally assess this student learning outcome
☐ We informally assess this student learning outcome (e.g., talking with student in advising session)
☐ Written exams
☐ Rubric to assess student work/portfolio
☐ Rubric to assess direct observation of student in advising session
☐ Rubric to assess reflective essays
☐ Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)
☐ Do not know
☐ [   ]Other

Q34.

How do you **use the information** gathered from assessing the student learning outcome "Student is able to develop long-term plans to meet educational and career goals?" (**Select all that apply**)

- ☐ We do not use the assessment information gathered
- ☐ Revise advising pedagogy
- ☐ Revise advising curriculum
- ☐ Revise student learning outcomes
- ☐ Revise process/delivery outcomes
- ☐ Evaluate individual advisors
- ☐ Evaluate the advising unit and services
- ☐ Lobby for new resources based on assessment results
- ☐ Fulfill assessment mandates of university administration
- ☐ Fulfill assessment mandates of university accrediting body
- ☐ Do not know
- ☐ [   ] Other

SLO 10

Q35.

Is the following, or something similar, a **formally identified** advising student learning outcome in **your advising situation**?

"Student uses an educational plan to manage progress toward degree completion"

- ○ No
- ○ Yes
- ○ Do not know

.

Fill this out only if you answered:

*Yes on question 35. Is the following, or something similar, a **formally identified** advising

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Measures and use of information for SLO 10 "Student uses an educational plan to manage progress toward degree completion"

For all other responses please move to question 38.

Q36.

Which of the following **methods** do you use to **assess** the student learning outcome "Student uses an educational plan to manage progress toward degree completion?" (**Select all that apply**)

- [ ] We do not formally assess this student learning outcome
- [ ] We informally assess this student learning outcome (e.g., talking with student in advising session)
- [ ] Written exams
- [ ] Rubric to assess student work/portfolio
- [ ] Rubric to assess direct observation of student in advising session
- [ ] Rubric to assess reflective essays
- [ ] Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)
- [ ] Do not know
- [ ] [   ] Other

Q37.

How do you **use the information** gathered from assessing the student learning outcome "Student uses an educational plan to manage progress toward degree completion?" (**Select all that apply**)

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- [ ] We do not use the assessment information gathered
- [ ] Revise advising pedagogy
- [ ] Revise advising curriculum
- [ ] Revise student learning outcomes
- [ ] Revise process/delivery outcomes
- [ ] Evaluate individual advisors
- [ ] Evaluate the advising unit and services
- [ ] Lobby for new resources based on assessment results
- [ ] Fulfill assessment mandates of university administration
- [ ] Fulfill assessment mandates of university accrediting body
- [ ] Do not know
- [ ] [   ] Other

SLO 11

Q38.

Is the following, or something similar, a **formally identified** advising student learning outcome in **your advising situation**?

"Student uses a career plan to manage progress toward industrial placement(s)"

- ( ) No
- ( ) Yes
- ( ) Do not know

.

Fill this out only if you answered:

*Yes on question 38. Is the following, or something similar, a **formally** **identified** advising

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> student learning outcome *in **your advising situation***?
>
> Measures and use of information for SLO 11 "Student uses a career plan to manage progress toward industrial placement(s)"
>
> For all other responses please move to question 41.

Q39.

Which of the following **methods** do you use to **assess** the student learning outcome "Student uses a career plan to manage progress toward industrial placement(s)?" (**Select all that apply**)

- [ ] We do not formally assess this student learning outcome
- [ ] We informally assess this student learning outcome (e.g., talking with student in advising session)
- [ ] Written exams
- [ ] Rubric to assess student work/portfolio
- [ ] Rubric to assess direct observation of student in advising session
- [ ] Rubric to assess reflective essays
- [ ] Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)
- [ ] Do not know
- [ ] Other

Q40.

How do you **use the information** gathered from assessing the student learning outcome "Student uses a career plan to manage progress toward industrial placement(s)?" (**Select all that apply**)

- [ ] We do not use the assessment information gathered

- [ ] Revise advising pedagogy
- [ ] Revise advising curriculum
- [ ] Revise student learning outcomes
- [ ] Revise process/delivery outcomes
- [ ] Evaluate individual advisors
- [ ] Evaluate the advising unit and services
- [ ] Lobby for new resources based on assessment results
- [ ] Fulfill assessment mandates of university administration
- [ ] Fulfill assessment mandates of university accrediting body
- [ ] Do not know
- [ ] [   ] Other

SLO 12

Q41.

Is the following, or something similar, a **formally identified** advising student learning outcome in **your advising situation**?

"Student engages with appropriate resources to meet individual needs for academic success"

- ( ) No
- ( ) Yes
- ( ) Do not know

.

> Fill this out only if you answered:
>
> *Yes on question 41. Is the following, or something similar, a **formally identified** advising student learning outcome *in **your advising situation**?

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Measures and use of information for SLO 12 "Student engages with appropriate resources to meet individual needs for academic success"

For all other responses please move to question 44.

Q42.
Which of the following **methods** do you use to **assess** the student learning outcome "Student engages with appropriate resources to meet individual needs for academic success?" (**Select all that apply**)

☐ We do not formally assess this student learning outcome
☐ We informally assess this student learning outcome (e.g., talking with student in advising session)
☐ Written exams
☐ Rubric to assess student work/portfolio
☐ Rubric to assess direct observation of student in advising session
☐ Rubric to assess reflective essays
☐ Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)
☐ Do not know
☐ [   ] Other

Q43.
How do you **use the information** gathered from assessing the student learning outcome "Student engages with appropriate resources to meet individual needs for academic success?" (**Select all that apply**)

☐ We do not use the assessment information gathered

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- ☐ Revise advising pedagogy
- ☐ Revise advising curriculum
- ☐ Revise student learning outcomes
- ☐ Revise process/delivery outcomes
- ☐ Evaluate individual advisors
- ☐ Evaluate the advising unit and services
- ☐ Lobby for new resources based on assessment results
- ☐ Fulfill assessment mandates of university administration
- ☐ Fulfill assessment mandates of university accrediting body

☐ [   ] Other

SLO 13

Q44.
Is the following, or something similar, a formally identified advising student learning outcome in your advising situation?

"Student engages with appropriate resources to meet individual needs for industrial placement(s) success"

- ○ No
- ○ Yes
- ○ Do not know

Fill this out only if you answered:

*Yes on question 44. Is the following, or something similar, a **formally identified** advising

student learning outcome *in **your advising situation**?*

Measures and use of information for SLO 13 "Student engages with appropriate resources to meet individual needs for industrial placement(s) success"

For all other responses please move to question 47.

Q45.

Which of the following **methods** do you use to **assess** the student learning outcome "Student engages with appropriate resources to meet individual needs for industrial placement(s) success?" (**Select all that apply**)

- ☐ We do not formally assess this student learning outcome
- ☐ We informally assess this student learning outcome (e.g., talking with student in advising session)
- ☐ Written exams
- ☐ Rubric to assess student work/portfolio
- ☐ Rubric to assess direct observation of student in advising session
- ☐ Rubric to assess reflective essays
- ☐ Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)
- ☐ Do not know
- ☐ [   ] Other

Q46.

How do you **use the information** gathered from assessing the student learning outcome "Student engages with appropriate resources to meet individual needs for industrial placement(s) success?" (**Select all that apply**)

☐ We do not use the assessment information gathered

☐ Revise advising pedagogy

☐ Revise advising curriculum

☐ Revise student learning outcomes

☐ Revise process/delivery outcomes

☐ Evaluate individual advisors

☐ Evaluate the advising unit and services

☐ Lobby for new resources based on assessment results

☐ Fulfill assessment mandates of university administration

☐ Fulfill assessment mandates of university accrediting body

☐ Do not know

☐ [_____] Other

SLO 14

Q47.

Is the following, or something similar, a **formally identified** advising student learning outcome in **your advising situation**?

"Student interprets a degree audit report for educational planning"

◯ No

◯ Yes

◯ Do not know

.

Fill this out only if you answered:
*Yes on question 47. Is the following, or something similar, a **formally identified** advising

> student learning outcome *in **your advising situation***?
>
> Measures and use of information for SLO 14 "Student interprets a degree audit report for educational planning"
>
> For all other responses please move to question 50.

Q48.
Which of the following **methods** do you use to **assess** the student learning outcome "Student interprets a degree audit report for educational planning?" (**Select all that apply**)

- [ ] We do not formally assess this student learning outcome
- [ ] We informally assess this student learning outcome (e.g., talking with student in advising session)
- [ ] Written exams
- [ ] Rubric to assess student work/portfolio
- [ ] Rubric to assess direct observation of student in advising session
- [ ] Rubric to assess reflective essays
- [ ] Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)
- [ ] Do not know
- [ ] Other

Q49.
How do you **use the information** gathered from assessing the student learning outcome "Student interprets a degree audit report for educational plannings?" (**Select all that apply**)

- [ ] We do not use the assessment information gathered
- [ ] Revise advising pedagogy

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☐ Revise advising curriculum
☐ Revise student learning outcomes
☐ Revise process/delivery outcomes
☐ Evaluate individual advisors
☐ Evaluate the advising unit and services
☐ Lobby for new resources based on assessment results
☐ Fulfill assessment mandates of university administration
☐ Fulfill assessment mandates of university accrediting body
☐ Do not know
☐ [   ] Other

SLO 15

Q50.

Is the following, or something similar, a **formally identified** advising student learning outcome in **your advising situation**?

"Student uses the online student portal for career/industrial placement planning"

◯ No
◯ Yes
◯ Do not know
.

Fill this out only if you answered:
*Yes on question 50. Is the following, or something similar, a **formally identified** advising student learning outcome *in **your advising situation**?*

Measures and use of information for SLO 15 "Student uses the online student portal for career/industrial placement planning"

For all other responses please move to question 53.

Q51.
Which of the following **methods** do you use to **assess** the student learning outcome "Student uses the online student portal for career/industrial placement planning?" (**Select all that apply**)

☐ We do not formally assess this student learning outcome
☐ We informally assess this student learning outcome (e.g., talking with student in advising session)
☐ Written exams
☐ Rubric to assess student work/portfolio
☐ Rubric to assess direct observation of student in advising session
☐ Rubric to assess reflective essays
☐ Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)
☐ Do not know
☐ ⌷ Other

Q52.
How do you **use the information** gathered from assessing the student learning outcome "Student uses the online student portal for career/industrial placement planning?" (**Select all that apply**)

☐ We do not use the assessment information gathered
☐ Revise advising pedagogy
☐ Revise advising curriculum

- [ ] Revise student learning outcomes
- [ ] Revise process/delivery outcomes
- [ ] Evaluate individual advisors
- [ ] Evaluate the advising unit and services
- [ ] Lobby for new resources based on assessment results
- [ ] Fulfill assessment mandates of university administration
- [ ] Fulfill assessment mandates of university accrediting body
- [ ] Do not know
- [ ] [_____] Other

SLO 16

Q53.

Is the following, or something similar, a **formally identified** advising student learning outcome in **your advising situation**?

"Student prepares questions for an advising appointment"

- ( ) No
- ( ) Yes
- ( ) Do not know

.

Fill this out only if you answered:

*Yes on question 53. Is the following, or something similar, a **formally** **identified** advising student learning outcome *in **your advising situation**?*

Measures and use of information for SLO 16 "Student prepares questions for an advising

---

appointment"

For all other responses please move to question 56.

Q54.

Which of the following **methods** do you use to **assess** the student learning outcome "Student prepares questions for an advising appointment?" (**Select all that apply**)

☐ We do not formally assess this student learning outcome

☐ We informally assess this student learning outcome (e.g., talking with student in advising session)

☐ Written exams

☐ Rubric to assess student work/portfolio

☐ Rubric to assess direct observation of student in advising session

☐ Rubric to assess reflective essays

☐ Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)

☐ Do not know

☐ [   ] Other

Q55.

How do you **use the information** gathered from assessing the student learning outcome "Student prepares questions for an advising appointment?" (**Select all that apply**)

☐ We do not use the assessment information gathered

☐ Revise advising pedagogy

☐ Revise advising curriculum

☐ Revise student learning outcomes

☐ Revise process/delivery outcomes

☐ Evaluate individual advisors
☐ Evaluate the advising unit and services
☐ Lobby for new resources based on assessment results
☐ Fulfill assessment mandates of university administration
☐ Fulfill assessment mandates of university accrediting body
☐ Do not know
☐ [   ] Other

SLO 17

Q56.

Is the following, or something similar, a **formally identified** advising student learning outcome in **your advising situation**?

"Student uses the online registration system, Canvas, to enroll in classes"

○ No
○ Yes
○ Do not know
.

> Fill this out only if you answered:
>
> *Yes on question 56. Is the following, or something similar, a **formally** **identified** advising student learning outcome *in **your advising situation**?
>
> Measures and use of information for SLO 17 "Student uses the online registration system, Canvas, to enroll in classes"

For all other responses please move to question 59.

Q57.

Which of the following **methods** do you use to **assess** the student learning outcome "Student uses the online registration system, Canvas, to enroll in classes?" (**Select all that apply**)

- [ ] We do not formally assess this student learning outcome
- [ ] We informally assess this student learning outcome (e.g., talking with student in advising session)
- [ ] Written exams
- [ ] Rubric to assess student work/portfolio
- [ ] Rubric to assess direct observation of student in advising session
- [ ] Rubric to assess reflective essays
- [ ] Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)
- [ ] Do not know
- [ ] _____ Other

Q58.

How do you **use the information** gathered from assessing the student learning outcome "Student uses the online registration system, Canvas, to enroll in classes?" (**Select all that apply**)

- [ ] We do not use the assessment information gathered
- [ ] Revise advising pedagogy
- [ ] Revise advising curriculum
- [ ] Revise student learning outcomes
- [ ] Revise process/delivery outcomes
- [ ] Evaluate individual advisors

☐ Evaluate the advising unit and services

☐ Lobby for new resources based on assessment results

☐ Fulfill assessment mandates of university administration

☐ Fulfill assessment mandates of university accrediting body

☐ Do not know

☐ [   ] Other

SLO 18

Q59.

Is the following, or something similar, a **formally identified** academic advising student learning outcome in **your advising situation**?

"Student accesses advising in a timely manner"

○ No

○ Yes

○ Do not know

.

Fill this out only if you answered:

*Yes on question 59. Is the following, or something similar, a **formally** **identified** advising student learning outcome *in **your advising situation***?

Measures and use of information for SLO 18 "Student accesses advising in a timely manner"

For all other responses please move to question 62.

Q60.

Which of the following **methods** do you use to **assess** the student learning outcome "Student accesses advising in a timely manner?" (**Select all that apply**)

- [ ] We do not formally assess this student learning outcome
- [ ] We informally assess this student learning outcome (e.g., talking with student in advising session)
- [ ] Written exams
- [ ] Rubric to assess student work/portfolio
- [ ] Rubric to assess direct observation of student in advising session
- [ ] Rubric to assess reflective essays
- [ ] Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)
- [ ] Do not know
- [ ] [   ] Other

Q61.

How do you **use the information** gathered from assessing the student learning outcome "Student accesses advising in a timely manner?" (**Select all that apply**)

- [ ] We do not use the assessment information gathered
- [ ] Revise advising pedagogy
- [ ] Revise advising curriculum
- [ ] Revise student learning outcomes
- [ ] Revise process/delivery outcomes
- [ ] Evaluate individual advisors
- [ ] Evaluate the advising unit and services
- [ ] Lobby for new resources based on assessment results
- [ ] Fulfill assessment mandates of university administration

☐ Fulfill assessment mandates of university accrediting body

☐ Do not know

☐ [_____] Other

Affective SLO 19

Q62.

Is the following, or something similar, a **formally identified** advising student learning outcome in **your advising situation**?

"Student appreciates how personal values relate to life goals"

○ No

○ Yes

○ Do not know

.

> Fill this out only if you answered:
>
> *Yes on question 62. Is the following, or something similar, a **formally** identified advising student learning outcome *in your advising situation*?
>
> Measures and use of information for SLO 19 "Student appreciates how personal values relate to life goals"
>
> For all other responses please move to question 65.

Q63.

Which of the following **methods** do you use to **assess** the student learning outcome "Student appreciates how personal values relate to life goals?" (**Select all that apply**)

- [ ] We do not formally assess this student learning outcome
- [ ] We informally assess this student learning outcome (e.g., talking with student in advising session)
- [ ] Written exams
- [ ] Rubric to assess student work/portfolio
- [ ] Rubric to assess direct observation of student in advising session
- [ ] Rubric to assess reflective essays
- [ ] Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)
- [ ] Do not know
- [ ] _____ Other

Q64.

How do you **use the information** gathered from assessing the student learning outcome "Student appreciates how personal values relate to life goals?" (**Select all that apply**)

- [ ] We do not use the assessment information gathered
- [ ] Revise advising pedagogy
- [ ] Revise advising curriculum
- [ ] Revise student learning outcomes
- [ ] Revise process/delivery outcomes
- [ ] Evaluate individual advisors
- [ ] Evaluate the advising unit and services
- [ ] Lobby for new resources based on assessment results
- [ ] Fulfill assessment mandates of university administration
- [ ] Fulfill assessment mandates of university accrediting body
- [ ] Do not know

☐ [ ] Other

SLO 20

Q65.

Is the following, or something similar, a **formally identified** advising student learning outcome in **your advising situation**?

"Student values/appreciates how his/her academic major reflects personal interests"

○ No
○ Yes
○ Do not know
.

Fill this out only if you answered:
*Yes on question 65. Is the following, or something similar, a **formally** **identified** advising student learning outcome *in your advising situation*?*
Measures and use of information for SLO 20 "Student values/appreciates how his/her academic major reflects personal interests"
For all other responses please move to question 68.

Q66.

Which of the following **methods** do you use to **assess** the student learning outcome "Student

values/appreciates how his/her academic major reflects personal interests?" (**Select all that apply**)

- [ ] We do not formally assess this student learning outcome
- [ ] We informally assess this student learning outcome (e.g., talking with student in advising session)
- [ ] Written exams
- [ ] Rubric to assess student work/portfolio
- [ ] Rubric to assess direct observation of student in advising session
- [ ] Rubric to assess reflective essays
- [ ] Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)
- [ ] Do not know
- [ ] _____ Other

Q67.

How do you **use the information** gathered from assessing the student learning outcome "Student values/appreciates how his/her academic major reflects personal interests?" (**Select all that apply**)

- [ ] We do not use the assessment information gathered
- [ ] Revise advising pedagogy
- [ ] Revise advising curriculum
- [ ] Revise student learning outcomes
- [ ] Revise process/delivery outcomes
- [ ] Evaluate individual advisors
- [ ] Evaluate the advising unit and services
- [ ] Lobby for new resources based on assessment results
- [ ] Fulfill assessment mandates of university administration
- [ ] Fulfill assessment mandates of university accrediting body
- [ ] Do not know

☐ [   ] Other

SLO 21

Q68.

Is the following, or something similar, a **formally identified** advising student learning outcome in **your advising situation**?

"Student values/appreciates how his/her career goals reflect personal interests"

◯ No
◯ Yes
◯ Do not know

.

Fill this out only if you answered:

*Yes on question 68. Is the following, or something similar, a **formally identified** advising student learning outcome *in **your advising situation***?*

Measures and use of information for SLO 21 "Student values/appreciates how his/her career goals reflect personal interests"

For all other responses please move to question 71.

Q69.

Which of the following **methods** do you use to **assess** the student learning outcome "Student

values/appreciates how his/her career goals reflect personal interests?" (**Select all that apply**)

- [ ] We do not formally assess this student learning outcome
- [ ] We informally assess this student learning outcome (e.g., talking with student in advising session)
- [ ] Written exams
- [ ] Rubric to assess student work/portfolio
- [ ] Rubric to assess direct observation of student in advising session
- [ ] Rubric to assess reflective essays
- [ ] Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)
- [ ] Do not know
- [ ] Other

Q70.

How do you **use the information** gathered from assessing the student learning outcome "Student values/appreciates how his/her career goals reflect personal interests?" (**Select all that apply**)

- [ ] We do not use the assessment information gathered
- [ ] Revise advising pedagogy
- [ ] Revise advising curriculum
- [ ] Revise student learning outcomes
- [ ] Revise process/delivery outcomes
- [ ] Evaluate individual advisors
- [ ] Evaluate the advising unit and services
- [ ] Lobby for new resources based on assessment results
- [ ] Fulfill assessment mandates of university administration
- [ ] Fulfill assessment mandates of university accrediting body
- [ ] Do not know

☐ ┌─────────────────────┐ Other
  │   │
  └─────────────────────┘

SLO 22

Q71.

Is the following, or something similar, a **formally identified** advising student learning outcome in **your advising situation**?

"Student values/appreciates having a sense of ownership of one's educational and career placement experiences"

◯ No
◯ Yes
◯ Do not know
.

┌──┐
│   Fill this out only if you answered: │
│   │
│ *Yes on question 71. Is the following, or something similar, a   │
│ **formally** identified advising   │
│ student learning outcome *in **your advising situation**?*   │
│   │
│ Measures and use of information for SLO 22 "Student values/appreciates having a sense │
│ of ownership of one's educational and career placement experiences" │
│   │
│ For all other responses please move to question 74.   │
└──┘

Q72.

Which of the following **methods** do you use to **assess** the student learning outcome "Student values/appreciates having a sense of ownership of one's educational and career placement

experiences?" (**Select all that apply**)

- ☐ We do not formally assess this student learning outcome
- ☐ We informally assess this student learning outcome (e.g., talking with student in advising session)
- ☐ Written exams
- ☐ Rubric to assess student work/portfolio
- ☐ Rubric to assess direct observation of student in advising session
- ☐ Rubric to assess reflective essays
- ☐ Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)
- ☐ Do not know
- ☐ [   ] Other

Q73.

How do you **use the information** gathered from assessing the student learning outcome "Student values/appreciates having a sense of ownership of one's educational and career placement experiences?" (**Select all that apply**)

- ☐ We do not use the assessment information gathered
- ☐ Revise advising pedagogy
- ☐ Revise advising curriculum
- ☐ Revise student learning outcomes
- ☐ Revise process/delivery outcomes
- ☐ Evaluate individual advisors
- ☐ Evaluate the advising unit and services
- ☐ Lobby for new resources based on assessment results
- ☐ Fulfill assessment mandates of university administration
- ☐ Fulfill assessment mandates of university accrediting body
- ☐ Do not know

☐ [_____] Other

SLO 23

Q74.

Is the following, or something similar, a **formally identified** advising student learning outcome in **your advising situation**?

"Student values/appreciates how advising has contributed to his/her educational and career placement experiences"

◯ No
◯ Yes
◯ Do not know
.

Fill this out only if you answered:

*Yes on question 74. Is the following, or something similar, a **formally** identified advising student learning outcome *in **your advising situation***?

Measures and use of information for SLO 23 "Student values/appreciates how advising has contributed to his/her educational and career placement experiences"

For all other responses please move to question 77.

Q75.

Which of the following **methods** do you use to **assess** the student learning outcome "Student values/appreciates how advising has contributed to his/her educational and career placement

experiences?" (**Select all that apply**)

- [ ] We do not formally assess this student learning outcome
- [ ] We informally assess this student learning outcome (e.g., talking with student in advising session)
- [ ] Written exams
- [ ] Rubric to assess student work/portfolio
- [ ] Rubric to assess direct observation of student in advising session
- [ ] Rubric to assess reflective essays
- [ ] Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)
- [ ] Do not know
- [ ] _____ Other

Q76.

How do you **use the information** gathered from assessing the student learning outcome "Student values/appreciates how advising has contributed to his/her educational and career placement experiences?" (**Select all that apply**)

- [ ] We do not use the assessment information gathered
- [ ] Revise advising pedagogy
- [ ] Revise advising curriculum
- [ ] Revise student learning outcomes
- [ ] Revise process/delivery outcomes
- [ ] Evaluate individual advisors
- [ ] Evaluate the advising unit and services
- [ ] Lobby for new resources based on assessment results
- [ ] Fulfill assessment mandates of university administration
- [ ] Fulfill assessment mandates of university accrediting body
- [ ] Do not know

☐ [   ]Other

SLO 24

Q77.

Is the following, or something similar, a **formally identified** advising student learning outcome in **your advising situation**?

"Student values/appreciates the role of industrial placement as part of his/her undergraduate experience"

◯ No
◯ Yes
◯ Do not know
.

Fill this out only if you answered:

*Yes on question 77. Is the following, or something similar, a **formally** identified advising student learning outcome *in **your advising situation***?

Measures and use of information for SLO 24 "Student values/appreciates the role of industrial placement as part of his/her undergraduate experience"

For all other responses please move to question 80.

Q78.

Which of the following **methods** do you use to **assess** the student learning outcome "Student values/appreciates the role of industrial placement as part of his/her undergraduate

experience?" (**Select all that apply**)

- [ ] We do not formally assess this student learning outcome
- [ ] We informally assess this student learning outcome (e.g., talking with student in advising session)
- [ ] Written exams
- [ ] Rubric to assess student work/portfolio
- [ ] Rubric to assess direct observation of student in advising session
- [ ] Rubric to assess reflective essays
- [ ] Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)
- [ ] Do not know
- [ ] [   ] Other

Q79.

How do you **use the information** gathered from assessing the student learning outcome "Student values/appreciates the role of industrial placement as part of his/her undergraduate experience?" (**Select all that apply**)

- [ ] We do not use the assessment information gathered
- [ ] Revise advising pedagogy
- [ ] Revise advising curriculum
- [ ] Revise student learning outcomes
- [ ] Revise process/delivery outcomes
- [ ] Evaluate individual advisors
- [ ] Evaluate the advising unit and services
- [ ] Lobby for new resources based on assessment results
- [ ] Fulfill assessment mandates of university administration
- [ ] Fulfill assessment mandates of university accrediting body
- [ ] Do not know

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☐ [   ] Other

SLO 25

Q80.

Is the following, or something similar, a **formally identified** advising student learning outcome in **your advising situation**?

"Student values/appreciates the benefits of university established industry relationships"

◯ No
◯ Yes
◯ Do not know
.

> Fill this out only if you answered:
>
> *Yes on question 80. Is the following, or something similar, a **formally** identified advising student learning outcome *in **your advising situation**?
>
> Measures and use of information for SLO 25 "Student values/appreciates the benefits of university established industry relationships"
>
> For all other responses please move to question 83.

Q81.

Which of the following **methods** do you use to **assess** the student learning outcome "Student values/appreciates the benefits of university established industry relationships?" (**Select all that**

apply)

- [ ] We do not formally assess this student learning outcome
- [ ] We informally assess this student learning outcome (e.g., talking with student in advising session)
- [ ] Written exams
- [ ] Rubric to assess student work/portfolio
- [ ] Rubric to assess direct observation of student in advising session
- [ ] Rubric to assess reflective essays
- [ ] Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)
- [ ] Do not know
- [ ] Other

Q82.

How do you **use the information** gathered from assessing the student learning outcome "Student values/appreciates the benefits of university established industry relationships?" (**Select all that apply**)

- [ ] We do not use the assessment information gathered
- [ ] Revise advising pedagogy
- [ ] Revise advising curriculum
- [ ] Revise student learning outcomes
- [ ] Revise process/delivery outcomes
- [ ] Evaluate individual advisors
- [ ] Evaluate the advising unit and services
- [ ] Lobby for new resources based on assessment results
- [ ] Fulfill assessment mandates of university administration
- [ ] Fulfill assessment mandates of university accrediting body
- [ ] Do not know

☐ [   ] Other

SLO 26

Q83.

Is the following, or something similar, a **formally identified** advising student learning outcome in **your advising situation**?

"Student values/appreciates the importance of interacting with faculty and staff members"

◯ No
◯ Yes
◯ Do not know

Fill this out only if you answered:
*Yes on question 83. Is the following, or something similar, a **formally** <u>identified</u> advising student learning outcome *in **your advising situation**?*
Measures and use of information for SLO 26 "Student values/appreciates the importance of interacting with faculty and staff members"
For all other responses please move to question 86.

Q84.

Which of the following **methods** do you use to **assess** the student learning outcome "Student values/appreciates the importance of interacting with faculty and staff members?" (**Select all**

that apply)

- ☐ We do not formally assess this student learning outcome
- ☐ We informally assess this student learning outcome (e.g., talking with student in advising session)
- ☐ Written exams
- ☐ Rubric to assess student work/portfolio
- ☐ Rubric to assess direct observation of student in advising session
- ☐ Rubric to assess reflective essays
- ☐ Surveys/questionnaires (e.g., student satisfaction survey, self-report by student)
- ☐ Do not know
- ☐ [   ] Other

Q85.

How do you **use the information** gathered from assessing the student learning outcome
"Student values/appreciates the importance of interacting with faculty and staff members?"
(**Select all that apply**)

- ☐ We do not use the assessment information gathered
- ☐ Revise advising pedagogy
- ☐ Revise advising curriculum
- ☐ Revise student learning outcomes
- ☐ Revise process/delivery outcomes
- ☐ Evaluate individual advisors
- ☐ Evaluate the advising unit and services
- ☐ Lobby for new resources based on assessment results
- ☐ Fulfill assessment mandates of university administration
- ☐ Fulfill assessment mandates of university accrediting body
- ☐ Do not know

☐ ⬚ Other

Other SLOs

Q86. Please list below any addtional advising student learning outcomes you have formally identified? (If you have not identified any additional advising student learning outcomes please respond 'None').

☐ ⬚ Other student learning outcomes

Q87.
If applicable, please state what methods you use to assess the advising student learning outcomes identified in question 86. (If no additiional methods to assess the advising student learning outcomes were identified please leave this blank).

☐ ⬚ Other assessment methods

Q88.
How do you use the information gathered from the advising assessment measures identified in question 86? (If you did not list any measures please leave this blank).

☐ ⬚ Information use

Block 38

Q89. Using the following scale: 1=Yes | 2=No | 3=Do not know | 4=Choose not to reply. Please indicate if the following categories were used as a source to identify advising student learning outcomes in **your advising situation**.

	1.Yes	2.No	3.Do not know	4. Choose not to reply
Mission of university	○	○	○	○
Needs of students on campus	○	○	○	○
Identification of services you provide to students	○	○	○	○
Delineated advising goals based on advising mission statement	○	○	○	○
Delineated advising objectives based on advising mission	○	○	○	○
Other	○	○	○	○

Q90. Please list any other sources you used to identify advising student learning outcomes in your advising situation.

☐ [   ] Other sources

Perceptions

Q91.

Using the following scale: 1=Very important | 2=Important | 3=Neutral | 4=Unimportant | 5=Very unimportant. Please indicate how **important or unimportant** each of the following factors are to increasing and/or improving the assessment of career and academic advising

	1. Very important	2. Important	3. Neutral	4. Unimportant	5. Very unimporta
Advisors need to believe that assessment of advising is a worthwhile endeavor.	○	○	○	○	○
Advisors need to know how to conduct assessment of advising.	○	○	○	○	○
Advisors need to feel confident in their abilities to properly conduct assessment of advising.	○	○	○	○	○
Advisors need to enjoy the assessment of advising process	○	○	○	○	○
Advisors need to collect better assessment data.	○	○	○	○	○
Advisors need more information about tools and approaches for	○	○	○	○	○

assessment of advising.

Advisors need better measures for assessment of advising.	◯	◯	◯	◯	◯
Advisors need more time to conduct assessment of advising activities	◯	◯	◯	◯	◯
Advisors need to be rewarded for assessment of advising activities.	◯	◯	◯	◯	◯
Advisors need more information about what similar universities are doing to assess advising.	◯	◯	◯	◯	◯
Administration needs to require more lecturers/support staff involvement in assessment of advising.	◯	◯	◯	◯	◯
Administration needs to provide more support for the assessment of advising.	◯	◯	◯	◯	◯
Administration needs to provide staff more time for assessment of advising.	◯	◯	◯	◯	◯
Administration needs to use assessment information to make decisions and changes.	◯	◯	◯	◯	◯
Advisees need to be more willing to participate in assessment of advising.	◯	◯	◯	◯	◯
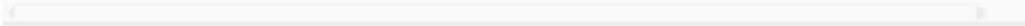
Q92. Please identify your position at your university.

◯ Faculty
◯ Staff
◯ Adminstrator
◯ [   ] Other

Q93. How long have you been working in this position in higher education:

◯ Less than 5 years
◯ 5-10 years
◯ 10-20 years
◯ 20-30 years
◯ 30-40 years
◯ [   ] Other

Closing

Thank you again for your valued time and

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APPENDIX C

IRB FORM AND NOTIFICATION

Andrews University

Office of Research and Creative Scholarship
Institutional Review Board
(269) 471-6361 Fax: (269) 471-6246 E-mail: irb@andrews.edu
Andrews University, Berrien Springs, MI 49104-0355

APPLICATION FOR APPROVAL OF HUMAN SUBJECTS RESEARCH

Please complete this application as thoroughly as possible. Your application will be reviewed by a committee of Andrews University IRB, and if approved it will be for one year. Beyond the one year you will be required to submit a continuation request. It is the IRB's responsibility to assign the level of review: Exempt, Expedited or Full. It is your responsibility to accurately complete the form and provide the required documents. Should your application fall into the exempt status, you should expect a response from the IRB office within 2 weeks; Expedited within 2 weeks and a Full review 4-6 weeks.

Please complete the following application:

1. Research Project
a) Title: Advising Assessment Practices of Advising Professionals at an Accredited United Kingdom Urban Career-focused Higher Education Institution: A Replicated Quantitative Analysis.

Will the research be conducted on the AU campus? ___ Yes _X_ No
If no, please indicate the location(s) of the study and attach an institutional consent letter that references the researcher's study.
Location: the research will be conduct at University College of Birmingham Summer Row, Birmingham B3 1JB, UK.

Consent: the formal permission will be emailed, according to online guide, to: irb@andrews.edu

b) What is the source of funding (please check all that apply)

_X_ Unfunded	
___ Internal Funding	Source:
___ External Funding	Sponsor/Source:
Grant title:	Award # / Charging String:
If you do not know the funding/grant information, please obtain it from your department	

2. Principal Investigator (PI)			
First Name:	**Last Name:**	**Telephone:**	**E-mail:**
Catherine	Mahrt-Washington	585-624-3137	mahrtwas@andrews.edu
_X_ Yes I am a (doctoral) student. If so, please provide information about your faculty advisor below.			
First Name:	**Last Name:**	phone:	**E-mail:**
Dr. Gustavo	Gregorutti	(2 71-6163	ggregoru@andrews.edu
Advisor's signature:			

Department:	Program:
Leadership	Higher Education Administration (doctorate program)

3. Co-investigators (Please list their names and contact information below)			
First Name:	Last Name:	Telephone:	E-mail:
First Name:	Last Name:	Telephone:	E-mail:
First Name:	Last Name:	Telephone:	E-mail:
First Name:	Last Name:	Telephone:	E-mail:

4. Cooperating Institutions

Is this research being done in cooperation with any institutions, individuals or organizations not affiliated with AU?
_X_ Yes ___ No If yes, please provide the names and contact information of authorized officials below.

Name of Organization: University College of Birmingham   **Address:** Summer Row, Birmingham B3 1JB, UK.

First Name:	Last Name:	Telephone:	E-mail:
Ray	Linforth	+44 (0) 121 604 1000 Ext 2234	R.Linforth@ucb.ac.uk

First Name:	Last Name:	Telephone:	E-mail
Danielle	Carey	0121 232 4138	D.Carey@ucb.ac.uk

Have you received IRB approval from another institution for this study?   ___ Yes _X_ No
If yes, please attach a copy of the IRB approval.

5. Participant Recruitment

Describe how participant recruitment will be performed. Include how and by whom potential participants are introduced to the study *(please check all below that apply)*

___ AU directory   ___ Postings, Flyers   ___ Radio, TV

 _X_ E-mail solicitation. Indicate how the email addresses are obtained: outreach will be done on my behalf by the UK contacts listed above.

___ Web-based solicitation. Specify sites:

 _X_ Participant Pool. Specify what pool: (about 300) academic and career advising professionals employed at the participating UK university.

___ Other, please specify:

Please attach any recruiting materials you plan to use and the text of e-mail or web-based solicitations you will use.

Email introduction outreach 1:

Hello,

I am a doctoral student in the Higher Education Administration program at Andrews University in Berrien Springs, Michigan. I am conducting a research study as part of my doctoral degree requirements. The title of the research is: Advising Assessment Practices of Advising Professionals at an Accredited United Kingdom Urban Career-focused Higher Education Institution: A Replicated Quantitative Analysis.

The purpose of this replicated study is to examine the academic and career advising practices that effect undergraduate advising student learning outcomes. Given your role, experience and expertise at your university, it is believed you would be a good fit for this research. Your participation will contribute to the current literature on this important subject.

Your participation in this research study is strictly voluntary and you may choose not to participate without fear of penalty or any negative consequences.

Confidentiality will be maintained, responses will be reported in the aggregate and will not identify individual people within the data analysis or result sections of the study.

As part of this important endeavor, I would be *very* grateful if you could spend approximately **30 minutes completing this online questionnaire**. This survey allows you the ability to save your responses and continue at a later time. The survey will be available until Wednesday, **Oct. 31, 2018.**

Follow this link to the Survey:

Or cut and paste the URL below into your internet browser:
_____

(NOTICE: By clicking on the above link you are consenting to participate in this research survey).

Email outreach 2: Reminder (two weeks after Email 1)

Sending a gentle reminder to complete the survey before the X (day) deadline.

Follow this link to the Survey:

Or cut and paste the URL below into your internet browser:
_____

(NOTICE: By clicking on the above link you are consenting to participate in this research survey).

** This important endeavor will assist our university, the doctoral student and contribute to the current literature on this important subject. **

Email outreach 3: Reminder 2 (one week before survey deadline)

Sending a gentle reminder to complete the survey before next week's deadline.

Follow this link to the Survey:
_____

Or cut and paste the URL below into your internet browser:
_____

(NOTICE: By clicking on the above link you are consenting to participate in this research survey).

** This important endeavor will assist our university, the doctoral student and contribute to the literature on this important subject. **

6. Participant Compensation and Costs		
Are participants to be compensated for the study? Yes ___ No **X** ___ If yes, what is the amount, type and source of funds?		
Amount:	Source:	Type:
Will participants who are students be offered class credit? ___ Yes ___ No **N/A**		
Are other inducements planned to recruit participants? ___ Yes **X** No If yes, please describe.		
Are there any costs to participants? ___ Yes **X** No If yes, please explain.		

7. Confidentiality and Data Security	
Will personal identifiers be collected? ___ Yes **X** No	Will identifiers be translated to a code? ___ Yes ___ No
Will recordings be made (audio, video)? ___ Yes **X** No If yes, please describe.	
Who will have access to data (survey, questionnaires, recordings, interview records, etc.)? Please list below. Me, and my dissertation committee members: Drs. Gregorutti, Kijai and Arthur.	

8. Conflict of Interest

Do you (or any individual who is associated with or responsible for the design, the conduct of or the reporting of this research) have an economic or financial interest in, or act as an officer or director for any outside entity whose interests could reasonably appear to be affected by this research project: ___ Yes **X** No

If yes, please provide detailed information to permit the IRB to determine if such involvement should be disclosed to potential research subjects.

9. Results

To whom will you present results (highlight all that apply)

___ Class ___ Conference ___ Published Article **X** Other If other, please specify:

AU Dissertation Defense for degree requirement/completion

10. Description of Research Subjects

If human subjects are involved, please highlight all that apply: **N/A**

___ Minors (under 18 years) ___ Prison inmates ___ Mentally impaired ___ Physically disabled
___ Institutionalized residents ___ Anyone unable to make informed decisions about participation
___ Vulnerable or at-risk groups, e.g., poverty, pregnant women, substance abuse population

11. Risks

Are there any potential damage or adverse consequences to researcher, participants, or environment? These include physical, psychological, social, or spiritual risks whether as part of the protocol or a remote possibility. **No.**
Please highlight all that apply (Type of risk):

___ Physical harm ___ Psychological harm ___ Social harm ___ Spiritual harm

12. Content Sensitivity

Does your research address culturally or morally sensitive issues? ___ Yes **X** No If yes, please describe:

13. Please provide (type in or copy - paste or attach) the following documentation in the boxes below:

Protocol : See attached Research Protocol document outlining: Background and Rationale, Procedures (design, sample, measurement/instrumentation, procedures, internal validity, and data analysis) and Bibliography.

Survey instrument or interview protocol:

Utilizing a pre-existing 2012 U.S. research survey. Permission received from survey creator. See attached email dated 4/22/15.

Survey attached as well.

Institutional approval letter (if off AU campus): Being emailed by UK contact to irb@andrews.edu according to online instructions.

My understanding is the U.K. Institutional approval letter was emailed to irb@andrews.edu on 9/25/18.

Consent form (for interviews and focus groups):

Consent is built into survey instructions. Participants are informed:

Please recognize that by completing and returning this survey, you have given your informed consent to participate in the study, which has been approved by the Andrews University Institutional Review Board (IRB). If you do not consent, you can simply choose not to continue at this time. If you decide after beginning the survey that you do not wish to continue, you may abort at any time. You also may choose not to respond to a particular question for any reason. This survey allows you the ability to save your responses and continue at a later time. Confidentiality will be maintained, responses will be reported in the aggregate and will not identify individual people within the data analysis or result sections of the study.

Participants recruitment documents: Same as section 5 of this application:

Email introduction outreach 1:

Hello,

I am a doctoral student in the Higher Education Administration program at Andrews University in Berrien Springs, Michigan. I am conducting a research study as part of my doctoral degree requirements. The title of the research is: Advising Assessment Practices of Advising Professionals at an Accredited United Kingdom Urban Career-focused Higher Education Institution: A Replicated Quantitative Analysis.

The purpose of this replicated study is to examine the academic and career advising practices that effect undergraduate advising student learning outcomes. Given your role, experience and expertise at your

university, it is believed you would be a good fit for this research. Your participation will contribute to the current literature on this important subject.

Your participation in this research study is strictly voluntary and you may choose not to participate without fear of penalty or any negative consequences.

Confidentiality will be maintained, responses will be reported in the aggregate and will not identify individual people within the data analysis or result sections of the study.

As part of this important endeavor, I would be *very* grateful if you could spend approximately **30 minutes completing this online questionnaire**. This survey allows you the ability to save your responses and continue at a later time. The survey will be available until Wednesday, **Oct. 31, 2018.**

Follow this link to the Survey:

Or cut and paste the URL below into your internet browser:

(NOTICE: By clicking on the above link you are consenting to participate in this research survey).

Email outreach 2: Reminder (two weeks after Email 1)

Sending a gentle reminder to complete the advising assessment survey before the X (day) deadline.

Follow this link to the Survey:

Or cut and paste the URL below into your internet browser:
_____

(NOTICE: By clicking on the above link you are consenting to participate in this research survey).

** This important endeavor will assist our university, the doctoral student and contribute to the current literature on this important subject. **

Email outreach 3: Reminder 2 (one week before survey deadline)

Sending a gentle reminder to complete the advising assessment survey before next week's deadline.

Follow this link to the Survey:

Or cut and paste the URL below into your internet browser:
_____

(NOTICE: By clicking on the above link you are consenting to participate in this research survey).

> ** This important endeavor will assist our university, the doctoral student and contribute to the literature on this important subject. **

| Principal Investigator's Assurance Statement for Using Human Subjects in Research |

__x___ I certify that the information provided in this IRB application is complete and accurate.

__x___ I understand that as Principal Investigator, I have ultimate responsibility for the conduct of IRB approved studies, the ethical performance of protocols, the protection of the rights and welfare of human subjects, and strict adherence to the study's protocol and any stipulation imposed by Andrews University Institutional Review Board.

__x___ I will submit modifications and / or changes to the IRB as necessary prior to implementation.

__x___ I agree to comply with all Andrews University's policies and procedures, as well as with all applicable federal, state, and local laws, regarding the protection of human participants in research.

__x___ My advisor has reviewed and approved my proposal.

RE: IRB 18-112 application for human subject approval

IRB <irb@andrews.edu>

Tue 10/16/2018 2:10 PM

To:Catherine Mahrt-Washington <cewsse@rit.edu>;
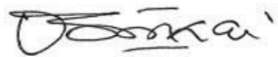
Cc:Gustavo Gregorutti <ggregoru@andrews.edu>;

📎 2 attachments

18-112 Exempt.pdf; IRB Modification, Renewal or final report form.doc;

Your IRB application for approval of research involving human subjects entitled: "*Advising assessment practices of advising professionals at an accredited United Kingdom Urban Career-focused higher education institution: A replicated quantitative analysis*" IRB protocol # 18-110 has been evaluated and determined Exempt from IRB review under regulation CFR 46.101 (b) (4). Please find attached your letter of determination.

Thank you.

Mordekai Ongo
Research Integrity & Compliance Officer
Andrews University
4150 Administration Dr
Berrien Springs, MI 49104-4910
Tel. Office: 269-471-6361
Email: irb@andrews.edu

SURVEY INVITATION EMAIL

You have the power to improve advising on a global scale! Your feedback is needed.

Dear colleagues,

We have received a request from Catherine Mahrt-Washington, a doctoral student enrolled in the higher education administration program at Andrews University, in Berrien Springs, MI. She is seeking assistance from academic (programme) and career (industrial placement) advisors for her dissertation study. Her study is IRB approved by Andrews University and seeks to gain a global perspective of advising student learning outcomes and advising assessment practices.

Your feedback will help distinguish the first international study of tertiary advising assessment practices!

Please see Catherine's email below:

Hello,
I understand that you may have a role in academic (programme) and/or career (industrial placement) advising of undergraduate students. I would very much appreciate your participation in this dissertation study which seeks to strengthen assessment literature and the advising community across the globe with a greater understanding of advising SLOs through advising assessment practices. The survey should only take about 30 minutes. Every participant helps improve this research effort!

Click this link to the Survey, or copy and paste into your web browser:
https://rit.az1.qualtrics.com/jfe/form/SV_bNQd6chcvT9tqbr

Your participation in this research is strictly voluntary. Your completion and submission of the questionnaire indicates your consent to participate in the study.

This survey is available until 31 March 2019.

APPENDIX E

SURVEY REMINDER EMAILS

FIRST REMINDER:

2 weeks before deadline: Survey outreach/email:

** 2 weeks after original survey email sent **:

Improving advising on a global scale! Your feedback is needed

Dear colleagues,

Recently you were sent a request to participate in an approved advising survey conducted by an Andrew's University doctoral student. If you have already completed the questionnaire, no further action is needed.

If you have not completed the survey please take the time to consider helping with this very important research by providing feedback on your valuable experiences within careers and academic advising.

The questionnaire should take no longer than 30 minutes to complete. Your participation will contribute to the identification of important advising information, from a global perspective, about academic and careers advising, including student learning outcomes, assessment practices, and advisor perceptions.

To access the survey, simply click on the link below or copy and paste into your web browser:
https://rit.az1.qualtrics.com/jfe/form/SV_bNQd6chcvT9tqbr

Your participation in this research is strictly voluntary. Your completion and submission of the questionnaire indicates your consent to participate in the study.

This survey is currently available until 31 March 2019.

Your participation in this important research is very much appreciated.

FINAL SURVEY REMINDER EMAIL:

1 week before deadline: Survey outreach/email:

** 1 week before deadline **:

Improving advising on a global scale! Your feedback is needed

Dear colleagues,

This is a final reminder to participate in the important advising survey being conducted by the Andrew's University doctoral student and originally presented to you by 21 January 2019 email.

If you have not completed the survey yet please consider assisting with this very important research by providing feedback on your valuable experiences within careers and academic advising by clicking on the link below or copy and paste into your web browser:
https://rit.az1.qualtrics.com/jfe/form/SV_bNQd6chcvT9tqbr

This survey will remain available until 8 March 2019.

Each participant's feedback constructively impacts this important research effort!

Your participation in this research is strictly voluntary. Your completion and submission of the questionnaire indicates your consent to participate in the study.

Thank you for your time and participation.

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CURRICULUM VITA

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OBJECTIVE
To enhance the advising student learning outcomes assessment literature with on-going research that leverages my experience, achievements, drive and skills.

EDUCATION

Andrew's University, Berrien Springs, MI.   Expected degree: 2020
Doctorate of Philosophy – Higher Education Administration
Dissertation: Advising assessment practices of advising professionals at an accredited United Kingdom urban career-focused higher education institution: A replicated quantitative analysis.
Chair, Dr. Gustavo Gregorutti

Rochester Institute of Technology, Rochester, N.Y.
Master of Science – Service Leadership and Innovation
Thesis: Gender, and other variables, affecting graduation outcomes and the future of science. Male vs. Female students 1995-2003 Rochester Institute of Technology's
Chair: Dr. Jim Myers

Niagara University, Niagara Falls, N.Y.
Bachelor of Science – Marketing

PROFESSIONAL EXPERIENCE
Assistant Dean   2007-PRESENT
Director of Academic Advising   2012-Present
College of Science, Dean's office   1999-Present
Rochester Institute of Technology (Rochester, N.Y.)
     Responsible for all functions relating to student affairs and academic advising.

- Supervisor and budget manager for college advising and honors program:

  o Responsible for the quality of college academic advising practices with 4 professional staff providing advising to over 1,300 college advisees.
  o Professional academic advisor - College of Science Exploration (undecided) program: student advising caseload between 15-25.

280

- o   Provide ongoing training and guidance for academic advisors and support staff.
- o   Facilitate advising processes for students in special circumstances (First Generation, Deaf/HOH, Autism Spectrum).
- o   Counsel college leadership about advising practices.
- o   Engage with on-campus partners (student affairs, academic affairs, financial aid, career services and cooperative education, academic support center, etc).

- • Responsible for the quality and success of the College Honors Program. Advisor for over 170 college of science honors students. Facilitate curriculum and research matches for students. Annual budget of over $30,000.

  - o   Manage honors program admission eligibility decisions for prospective top-tiered students into college of science programs.
  - o   Mentor college student honors representative in leadership each year

- • Chair of the COS Student Honors and Awards faculty committee: manage the faculty committee members through the annual student honors and awards (ie: student delegate, research honors, etc.).

- • Advisor for College of Science Student Advisory Board (COSSAB) student group. COSSAB acts as a liaison between the COS students, student government, and the Dean. COSSAB members are responsible for organizing the annual alumni networking homecoming event and spring picnic, and are involved with issues involving laboratory maintenance, appearance of the COS, as well as other concerns facing our student body.

- • Partner with the Dean in outreaching to alumni and maintain alumni relations.
- • Oversee student affairs policies and procedures for the College.
- • Responsible for the COS Study Abroad programming.
- • Developed the College of Science marketing plan for the innovative summer pre-freshman program.
- • Directed the development, organization and implementation of the innovative College of Science Summer Research Scholars 4-week pre-freshman program.

- • Marketing Coordinator   2002 - 2007
  - o   Responsible for the marketing and public relations of the College of Science.
  - o   Responsible for college student recruitment efforts; Open Houses, Orientation, and College and Careers.
  - o   Overall responsibility for administrative support to Assistant Dean's college recruitment, corporate and community initiatives.
  - o   Integral member of team that identified marketing objectives and developed strategies to promote programs.
  - o   Organized/arranged College of Science special events and community presentations. Created, selected and prepared presentation materials.

- o Managed the summer research program for over 90 research students.
- o Designed and facilitated summer student research proposal submission assessment rubric with faculty.
- o Advisor - College of Science African American, Latin American and Native American student group (COSAALANA).

- • Senior Staff Assistant   1999 - 2002
  - o Responsible for event planning and public relations of the College of Science.
  - o Overall responsibility for administrative support to Assistant Dean's college recruitment, corporate and community initiatives.
  - o Managed the design and timely maintenance of the College of Science web pages.

GRANTS
- o 2008—named a facilitator for the NSF-Undergraduate Research and Mentoring (URM) grant that supported deaf and hard of hearing students performing undergraduate research and preparing them for graduate school in biology.
- o 2010—included in the California State University NSF IQuest Grant summer institute. Demonstrated the impact of the COS Honors research program to the grant participants (science teachers and students) being trained to use supporting technology and research for science teaching in California K-12 programs.
- o Senior V.P. for Student Affairs College of Science African American, Latin American, Native American (COSAALANA) event grant.

PRESENTATIONS/TRAINING   2010-Present
- o Working with Undecided and Re-Deciding Students: What Works Best? – Jan. 2016
- o SafeZone Training – Jan. 2016
- o Title IX Training – Nov. 2015
- o Self-Awareness & Motivation in Students having Academic Difficulties – July 2015
- o Mental Health and College Students: What's an Advisor To Do? – Nov. 2014
- o FERPA and Records Management – August 2012
- o Using Student Engagement as a Tool for Student Success – April 2012
- o Study Abroad for Academic Advisors – February 2012
- o Understanding the Needs of First Generation and Low-Income College Students – February2010
- o Reaching and Retaining Students: Effective Academic Advising Strategies – March – 2010
- o Case Management: A Practical Approach – April 2010
- o Strategies for Engaging Diversity: Working with AALANA Students – May 2010
- o Supplemental Instruction: An International Model of Academic Support and Retention – January 2009
  Developing Skills for New Supervisors – January 2009
- o Utilizing Student Development Theory: An Introduction for Practice – December 2009

o Individual Conflict of Interest and Commitment – January 2008
  RIT's Leadership Forum – October 2007

HONORS AND RECOGNITION
  o Dancy Duffus Outstanding Citizen Award.
  o Outstanding Contributions to Student Success Award nominee.
  o Mentor: Partnership in Pluralism Award.
  o Multicultural Center for Academic Success (MCAS) Community Partner Award.
  o Student Government Extra Mile Award—for Outstanding and Attentive Services to Students.
  o Alpha Sigma Lambda Honor Society (3) certificates—for having a positive influence on graduating seniors.
  o University Outstanding Staff Award nominations—2006, 2010, 2015, 2017.

MEMBER
  o National Association of Academic Advising Association (NACADA)
  o Assessment Network of New York (ANNY)

UNIVERSITY AFFILIATIONS: STUDENT AFFAIRS REPRESENTATIVE
  o College of Science Dean's Administrative Council
  o Chair: Student Honors and Awards committee
  o Dean's Delegates Advising committee
  o Student Behavior and Conduct College Liaison
  o Ombuds Advisory Board
  o University Studies Advisory Board
  o McNair Advisory Board
  o Upper-class Initiatives Advisory Board
  o Caroline Werner Gannett Advisory Board
  o Member of many Institute search committees

CONFERENCE ATTENDANCE
  o 2018 Rochester Area Colleges Advising (RAC advising): Advising for Student Success: Participating in the Academic Marathon – Henrietta, N.Y.
  o 2017 NACADA regional conference: "Advising Values" – Verona, N.Y.
  o 2016 Rochester Area Colleges Advising (RAC advising): "Advising for Student Success: Be the Difference" – Henrietta, N.Y.
  o 2015 Rochester Area Colleges Advising (RAC advising): "Advising for Student Success: Through Reconnecting, Revitalization, and Collaboration" – Henrietta, N.Y.
  o 2015 ANNY Regional Conference: "Using Data for Decision Making: The Data-Informed Leader" – Amherst, N.Y.
  o 2014 ANNY 2nd Annual Conference: "Using Assessments to Drive Improvement: Practical Applications from the Field" – Rochester, N.Y.
  o 2012 NACADA 26th Annual Academic Advising Summer Institute – Austin, TX.

COMMUNITY SERVICE:
- o Board Member: 1ST PRIORITY FEDERAL CREDIT UNION   2001-2010
  - o Three-year terms. Determine product interest rates, new product initiatives, loan write offs, and determine year-end employee pay increases in partnership with the credit union President. 1st Priority Federal Credit Union merged with Advantage Federal Credit Union December 2010.
- o Benincasa Hospice House   2001-2003
  - o Volunteer having the privilege to care for terminally ill residents.