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This chapter explores the concept of research-driven practice in student affairs and provides an overview of the Wabash National Study of Liberal Arts Education.

## Conceptualizing Research-Driven Practice and the Wabash National Study

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Early morning staff meetings. Parent phone calls. One-on-one advising meetings with student leaders. Student conduct meetings. Developing learning outcomes. Responding to campus crises. Trudging through email messages. Late-night student organization meetings. The day-to-day work of a student affairs professional is personally rewarding and critical to student success, but it is often high stress and fast-paced. Racing to put out fires during long workdays with little time to plan for the next week or month, let alone keep up with the latest research in the field, becomes commonplace for many professionals. The primary goal of this volume is to demonstrate practical ways student affairs professionals can use research to elevate their work with students. We use findings from the Wabash National Study of Liberal Arts Education (WNS) as a backdrop to accomplish this goal. This chapter lays the groundwork for the subsequent chapters in this volume. In this chapter, we first explore research-driven practice as a professional imperative. Next, we provide a conceptual overview of the WNS followed by an abbreviated review of both the quantitative and qualitative methods used in this large-scale, longitudinal study.

### Defining Research-Driven Practice

The concept of research-driven practice is at the core of this volume. Conceptually, research-driven practice is intentionally more holistic than the *data-driven decision making* more commonly referred to in education circles. Employed frequently in K–12 education as a response to state and federal accountability requirements, data-driven decision making uses assessment

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results and institutional research to make more informed decisions. Marsh, Pane, and Hamilton (2006) define data-driven decision making in education as:

teachers, principals, and administrators systematically collecting and analyzing various types of data, including input, process, outcome and satisfaction data, to guide a range of decisions to help improve the success of students and schools. Achievement test data, in particular, play a prominent role in federal and state accountability policies. (p. 1)

By contrast, research-driven practice is a broader approach, differing from data-driven decision making in two main ways: (a) attention to the entire research process, including the motivating research questions, participant selection, methodology, and limitations in addition to the findings; and (b) a focus on comprehensive practice, including student mentoring, programmatic design, and student learning support, rather than an emphasis on the decision-making process.

Some scholars have phrased this mode of being by using the terms “scholar-practitioner” or “practitioner-scholar” to acknowledge the confluence of theory and research with practical application (e.g., Carpenter & Stimpson, 2007; Erwin & Wise, 2002; Sriram & Oster, 2012). For example, Carpenter (2001) outlined the elements of scholarly practice as being intentional, grounded in theory/research/data, peer-reviewed, accepting of a variety of perspectives, collaborative, open to change, unselfish, careful, regenerative, and contextual.

Still others suggest a more complex way of viewing the spaces student affairs educators occupy with respect to the scholarship in the field. Manning pondered the division between faculty and practitioners in student affairs by proposing a continuum from pure scholar to pure practitioner, arguing that not all educators in student affairs should contribute to the creation of scholarship (Jablonski, Mena, Manning, Carpenter, & Siko, 2006). In her model, there are *pure scholars*, individuals who have exclusively contributed to the scholarship in the field and who have spent little time as administrators. The next point along her continuum is the *scholar/practitioner*. This refers to someone who has previously served as an administrator, but who currently occupies a faculty or research-related role. The scholarship of the scholar/practitioner, Manning suggested, is a combination of empirical research and reflective writing about student affairs practice. In contrast, she titles the next group the *practitioner/scholars*. These are full-time professionals and administrators who write and make scholarly contributions to the field in addition to their professional practice in student affairs. Manning’s next group, the *practitioners*, are those full-time professionals who are not actively contributing to the scholarship in the field, but who consistently use theory and research in their practice. The final group along this continuum is what Manning calls the *pure practitioners*. These are

individuals who place little value on the use of scholarship to inform practice. Manning's framework serves to move educators out of an either/or mode of thinking about the role of scholarship in our field and serves as a valuable tool for conceptualizing the diversity of roles among professionals and scholars.

In this volume, we emphasize the middle three modes of operating (scholar/practitioners, practitioner/scholars, and practitioners), as each of these frames offers at least some integration of theory, research, and practice. We believe these middle modes work toward Carpenter's (2001) conceptualization of scholarly practice and thus further the professionalization and the credibility of all student affairs educators. In this volume, we employ findings from the Wabash National Study of Liberal Arts Education to illustrate the ways in which student affairs professionals in higher education can use research to enhance their practice.

## Overview of the Wabash National Study

The Wabash National Study of Liberal Arts Education (WNS) was a national, concurrent mixed method in design, longitudinal study that explores the college experiences that influence students' development along key educational outcomes over four years of college. The two primary goals of the WNS were to understand the teaching practices, activities, and environmental structures that fostered a liberal arts education and to create tools to assess liberal arts education in American colleges and universities (Wabash National Study, n.d.). In particular, the WNS focused on developmental outcomes associated with a liberal arts education, including self-authorship and seven liberal arts outcomes: integration of learning, inclination to inquire and lifelong learning, effective reasoning and problem solving, moral character, intercultural effectiveness, leadership, and psychological well-being (King, Kendall Brown, Lindsay, & VanHecke, 2007). These liberal arts educational outcomes are distinctive from other types of learning outcomes because of their holistic nature and the connection between outcomes that incorporate cognitive, interpersonal, and intrapersonal development. The WNS sought to explore these seven outcomes. Although all seven outcomes were explored in the qualitative branch of the WNS, only six outcomes were measured in the quantitative branch of the study. Integration of learning was only studied in the qualitative portion of the study. In the sections that follow, we offer brief overviews of the quantitative and qualitative methods used in the WNS to provide context for the remaining chapters in this volume.

**Quantitative Methods in the WNS.** The quantitative data presented in this volume largely represent the student sample from 17 four-year institutions that entered the WNS during the fall of 2006. However, two additional cohorts of institutions and students began the study in 2007 and 2008, respectively. Although most of the published findings from the WNS

only use findings from the 2006 entering cohort, occasionally authors chose to include multiple cohorts in their analyses.

*Institutional and Student Sample.* Researchers used a two-step sampling strategy to select institutions for the WNS. First, 19 institutions were selected from over 60 colleges and universities that responded to a national invitation to participate in the WNS. Institutions were chosen based on their vision of liberal arts education, as well as to reflect a variety of characteristics, including institutional type (e.g., liberal arts college, research university, regional university) and control (public or private), size, and location, among others. The sample in the study consisted of incoming first-year students at 17 four-year colleges and universities and 2 two-year colleges from the Northeast/Middle-Atlantic, Southeast, Midwest, and Pacific Coast regions in the United States. Using the 2007 Carnegie Classification of Institutions, 3 of the participating institutions were research extensive universities, 3 were comprehensive regional universities that did not grant the doctorate, 11 were baccalaureate liberal arts colleges, and 2 two-year colleges.

The individuals in the sample were first-year, full-time, undergraduate students at these institutions. In the fall of 2006, the sample was selected in one of three ways. First, at the largest participating institution in the study, the sample was selected randomly from the incoming class in the College of Arts and Sciences. For the remaining larger institutions, the sample was selected randomly from the incoming first-year class. Third, for a number of the smallest institutions in the study—all liberal arts colleges—the sample was the entire incoming first-year class. Students were invited to participate in a national longitudinal study examining how a college education affects students, with the ultimate goal of improving the undergraduate experience.

The initial data collection occurred in fall 2006, with 4,193 students from the 17 four-year institutions. This first data collection lasted between 90 and 100 minutes, and students were paid a stipend of \$50 for their participation. Data collected included a WNS precollege survey that sought information on student demographic characteristics, high school experiences, life/career plans, and family background. Students also completed a series of instruments that measured dimensions of cognitive and personal development theoretically associated with a liberal arts education, such as critical thinking, moral reasoning, need for cognition, inclination to inquire and lifelong learning, and psychological well-being (King et al., 2007).

Two follow-up data collections occurred, once in the spring of 2007 (approximately at the end of the first year of college) and once in the spring of 2010 (approximately at the end of the fourth year of college). Each of these data collections took about two hours and participating students were paid an additional stipend of \$50 each time. Both follow-up collections included gathering two types of data: information on students' college experiences using the National Survey of Student Engagement (NSSE) and the WNS Student Experiences Survey, and posttest data using the series of instruments measuring aspects of students' intellectual and personal

development. The entire data collection was administered and conducted by ACT, Inc. (formerly the American College Testing Program).

Of the original sample of 4,193 students who participated in the initial fall 2006 data collection, 2,212 participated in the spring 2010 follow-up, for a response rate of 52.8%. These students represented approximately 10% of the total population of incoming first-year students at the 17 participating institutions. Researchers developed weighting algorithms to provide some adjustment for potential response bias by sex, race, academic ability, and institution in the samples analyzed.

The primary dependent measures in the WNS included the following instruments: the critical thinking portion of the Collegiate Assessment of Academic Proficiency (CAAP) to assess effective reasoning and problem solving (ACT, 1991); the Defining Issues Test 2 to assess moral reasoning (Rest, Narvaez, Thoma, & Bebeau, 1999); the Need for Cognition Scale (Cacioppo, Petty, Feinstein, & Jarvis, 1996) and the Positive Attitude Toward Literacy Scale (Bray, Pascarella, & Pierson, 2004) to assess the inclination to inquire and lifelong learning; the Miville-Guzman Universality-Diversity Scale (Miville et al., 1999) and the Openness to Diversity/Challenge Scale (Pascarella, Edison, Nora, Hagedorn, & Terenzini, 1996) to assess intercultural effectiveness; the Ryff Scales of Psychological Well-Being (Ryff & Keyes, 1995) to assess well-being; and the revised version II of the Socially Responsible Leadership Scale (Tyree, 1998) to measure leadership. Each of these dependent measures was carefully selected by the principal investigators of the WNS in the years leading up to the initial data collection. Complete descriptions, coding, reliability, and validity information of all dependent and independent measures used in the study can be found in the quantitative research methods report for the WNS (Pascarella, 2007).

**Qualitative Methods in the WNS.** The qualitative branch of the research team selected 6 institutions from the 19 institutions in the WNS to participate in the interview phase of the study. Institutional type, geographic location, and diversity of student body were all considered in the selection process. The selected institutions included four small liberal arts colleges, one mid-sized and one large university, two Hispanic-serving institutions, and one that enrolls approximately 50% African-American and 50% White students.

Researchers selected interview participants from students at the six institutions who completed the quantitative survey component of the study and indicated their willingness to participate in an interview, oversampling men and Students of Color to yield a more balanced distribution. The study team interviewed 315 students early in the fall of 2006 (hereafter Year 1). About one third of these students identified as African American, Hispanic, or as Asian/Pacific Islanders; the remainder identified as White. About 10% were born in countries other than the United States. The sample was 54% female. Researchers were able to contact and reinterview 228 of these

students in fall 2007 (Year 2), 204 in fall 2008 (Year 3), and 177 in fall 2009 (Year 4).

Trained interviewers conducted individual interviews that lasted 60 to 90 minutes; these were audio recorded and transcribed verbatim. Participants received a \$30 stipend per interview. The interview was organized into three segments to give respondents maximum freedom to identify relevant content yet elicit information about the practices and conditions that fostered growth on the seven outcomes and self-authorship (Baxter Magolda & King, 2007). The opening segment focused on how students' entering characteristics (i.e., ways of constructing knowledge, self, relationships; personal history) affected achievement of or development toward self-authorship. The second (and primary) segment of the interview explored the educational experiences students saw as most significant and how they made meaning of these experiences. The third segment addressed the students' synthesis of their experiences and patterns in their meaning making.

Working from the complete interview transcripts, trained research team members created summaries of each interview comprised of three major elements: (a) overview of the student's background characteristics; (b) description of each experience the student identified as important, its effect on the student (i.e., what the student learned from the experience), and illustrative quotes from the student; and (c) assessment of the student's developmental meaning making in cognitive, intrapersonal, and interpersonal domains, as well as an overall assessment across dimensions illustrated with student quotes (Baxter Magolda & King, 2012).

To guide self-authorship assessment, team members used a 10-position continuum (Baxter Magolda & King, 2012). This continuum reflects the gradual movement of external frameworks to the background and the internal voice to the foreground. This process mirrors Perry's (1970) description of the evolution of his developmental positions. Researchers embraced his use of the term *position* because it reflects the particular structure a person uses to understand knowledge, identity, and relationships at a particular point in time. This 10-position continuum reflects a nominal scale, as is the case with Perry's nine positions. Each position reflects a more complex meaning-making structure than the prior position; however this is not a lock-step stage model. The positions evolve gradually, vary in duration, and movement on the continuum is better characterized as a helix than a line.

Determining the developmental effect of each experience was important for understanding factors that affect students' development. Researchers followed the approach introduced by King, Baxter Magolda, Barber, Kendall Brown, and Lindsay (2009) to identify those cases where a student reported that as a result of an experience, she or he now used a more complex approach to understanding knowledge, oneself, or relationships.

King et al. (2009) termed these “developmentally effective experiences” (DEEs) to reflect their positive developmental impact.

In the qualitative branch of the WNS, researchers addressed issues of trustworthiness and quality in several ways. Extensive training for all interviewers and summarizers included training in the constructivist-developmental foundation that guided the interview construction and analysis, training in the purpose of the interview, practice interviewing with feedback, an analysis of interviewer subjectivities, and practice summary writing with feedback. (Additional details on the training process can be found in Baxter Magolda & King, 2012.)

The sheer size of the interview sample (924 interviews) prohibited using the traditional approaches to trustworthiness (e.g., member checking) due to funding considerations and logistical difficulties (the in-person contact was limited to the annual interview weeks on each campus). Instead, researchers implemented a rigorous process to establish the credibility of the interview analysis. The process for establishing trustworthiness of the developmental assessments evolved as the assessment system became more complex. Over time, researchers expanded and refined their understanding of the assessment through pooled judgment rather than relying on individual assessments. The principal investigators continued to review approximately three summaries from each new summarizer throughout the course of the study; they also reviewed experienced summarizers’ work upon request.

Credibility was enhanced through extended engagement with the students; individual interviews took place annually and typically lasted over an hour. Rapport building was built into the first part of the interview so that participants would be comfortable with the interview process; researchers attempted to use the same interviewer in subsequent interviews for continuity. Additionally, students had the opportunity to provide feedback about the interview process at the end of each interview. Participants were offered copies of the verbatim transcripts and invited to fill in words that were inaudible, correct factual errors, and offer comments or additional insights to a team member after receiving the transcript. Transferability was heightened through the use of thick description of the narratives whenever possible.

## **Using the WNS Findings to Inform Practice**

The magnitude of its scope, rigor, and intentional research design situates the WNS to offer important insights into a variety of college student experiences and student affairs programs and services. A simple glance at the list of publications in major higher education journals and presentations at research, policy, and practice-oriented national conferences using data from the WNS over the past seven years suggests that this national study is already influencing what educators understand about college experiences today (Center for Research on Undergraduate Education, n.d.; Pascarella &

Blaich, 2013). To date, much of the national buzz around the WNS has been related to findings on practices inside the classroom on college campuses (e.g., Berrett, 2012; Pascarella, Blaich, Martin, & Hanson, 2011; Schmidt, 2011). Less attention has been given to the WNS in student affairs circles even though many of the studies have direct implications for educators' work with students outside of the classroom.

In the remaining chapters of this volume, studies employing data from the WNS with implications for student affairs professionals are presented in order to spark dialogue about the ways in which these data might improve policy and practice in student affairs administration in the coming years. As we reflect on the widening divide between researchers and practitioners in student affairs and the philosophical charge to allow research, at least in part, to drive practice, it is our hope that the chapters contained within this volume will serve as a framework for how professionals might synthesize, critically analyze, and apply research to their own practice in student affairs.

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