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Being Transformed by Being a Peer Mentor: An Examination of High-Impact and
Transformative Peer Mentor Experience

Bryce D. Bunting

A dissertation submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of
Doctor of Philosophy

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December 2014

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ABSTRACT

Being Transformed by Being a Peer Mentor: An Examination of High-Impact and Transformative Peer Mentor Experience

Bryce D. Bunting

Department of Instructional Psychology and Technology, BYU

Doctor of Philosophy

This multi-article dissertation explores the potential for the undergraduate peer mentoring experience to contribute to transformative learning for those who serve in peer mentoring or peer leadership roles. While past research has established that peer mentors experience a variety of positive outcomes associated with their leadership experience, there are gaps in the literature with regard to how the peer mentor experience can be intentionally designed as a high-impact practice for student leaders. Through three qualitative studies, as well as a comprehensive literature review, this dissertation addresses this gap by exploring what peer mentors report learning through their mentoring experiences (Article #1), the types of experiences that contribute to transformative learning (Articles #2 and #3), and how transformative learning can be facilitated through a particular designed training intervention (Article #4). Based on the findings of these four studies, an emerging framework is proposed to describe the characteristics of high-impact and transformative PM learning environments. This framework suggests that transformative PM learning is most likely when (a) the learning of PMs themselves is an explicit objective of the program or initiative, (b) PMs are engaged in purposeful routines and structured practices that facilitate learning, (c) PMs are exposed to unfamiliar and challenging situations in their mentoring practice, (d) theoretical and conceptual understandings (e.g., selected readings) are integrated into PM development; (e) PMs are provided with frequent and structured opportunities for reflection on their experiences, and (f) PMs are part of a supportive mentoring community. Recommendations for the design of high-quality PM learning environments are made based on the elements of this framework. Additionally, directions for future research on peer mentoring as a high-impact practice are made.

Keywords: communities of practice, high-impact practice, knowledge integration, narrative research, peer educator, peer leader, peer mentor, reflection, transformative learning

ACKNOWLEDGEMENTS

I wish to thank the chair of my dissertation committee, Dr. David Williams, for his encouragement, guidance, and feedback throughout this project. His thoughtful questions and gentle nudging have strengthened my ideas, while ensuring they remained my own. I am also in debt to Dr. Andrew Gibbons for taking the time to review early drafts of this dissertation, page by page at times, and for introducing me to new ways of considering the role of theory in both my scholarship and practice. Additionally, Dr. John Bell's thoughtful feedback has helped to both clarify my thinking and help me be more articulate in expressing it. I am also tremendously grateful to Dr. Jennifer Keup for her willingness to participate in my dissertation experience as an external committee member, as well as to her colleagues at the University of South Carolina for allowing me to borrow her expertise. Her willingness to travel to Utah for my dissertation defense represented a generous sacrifice of both time and energy. Further, I am appreciative of her graciousness in mentoring me through the early stages of my career in higher education administration and brokering professional opportunities that have significantly contributed to my growth. And, to Dr. Stefinee Pinnegar, I express thanks for seeing my potential as a scholar before anyone else, and patiently encouraging me to take the plunge into academia. Over the last 10 years, she has been the consummate teacher, mentor, research colleague, and friend.

I am also grateful for the generous support of the First-Year Mentoring department at BYU, particularly Dr. Pat Esplin, who supported my initial foray into graduate studies, and Dr. Phil Rash who has been generous in allowing me to marry my professional work and graduate studies.

Finally, I wish to thank my wife and daughters for putting up with an absentee husband and father for far too long. For the last six years, they have kept dinner warm, given me hugs on

hard days, and listened to me talk about “boring doctor of philosophy stuff” on more nights than I could ever count or thank them for.

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Description of Research Agenda and Structure of the Dissertation

This multi-article dissertation explores the impact of the undergraduate peer mentoring experience upon those who serve as peer mentors (PMs). It is intended to provide understanding of, first, what PMs learn through their mentoring experiences, with particular focus on how being a PM contributes to holistic and, in some cases, transformative learning (Mezirow, 1990).

Traditionally, peer mentoring and peer leadership initiatives have been implemented to improve the experience of the mentees or protégés; however, recent scholarship has suggested that the students who provide mentoring or leadership gain just as much, if not more, than the students they serve (Keup, 2012). Thus, an additional goal of the research has been to contribute practical understanding of how peer mentoring initiatives on college campuses can be designed to be more *mentor-centered*, thereby functioning as a high-impact practice (Kuh, 2008) that facilitates the integrative and applied learning that characterize a high-quality liberal arts education as described by the Association of American Colleges and Universities (AAC&U) (2011). Each article in the dissertation makes a unique contribution to this overall research agenda.

In what follows, I begin by situating my research agenda within past research on peer mentoring, then outlining the practical and theoretical significance of this dissertation and its findings. Next, I articulate specific goals and research questions that initiated my work in this area. Finally, I provide a brief description of each of the individual studies that I have conducted and their relationship to my overall research agenda.

Problem

The transition into and through higher education presents unique challenges for students as they are faced with the task of becoming accustomed to more rigorous academic demands, new social networks, and a host of other transitional issues associated with success in these

unfamiliar settings (e.g. Barefoot, et al., 2005; Kuh, Kinzie, Schuh, & Whitt, 2005; Smith, MacGregor, Matthews, & Gabelnick, 2004; Upcraft, Gardner, Barefoot, & Associates, 2005). A relationship with an experienced and successful peer is a factor that has been demonstrated to ease this transition and promote positive outcomes (Pascarella & Terenzini, 1991; Shook & Keup, 2012; Smith, et al., 2004). Not only do peers play a significant role in the development of interpersonal relationships and social maturity (Evans, Forney, Guido, & Patton, 2010; Skipper, 2005), they are associated with a positive transition into higher education (Brisette, Scheier, & Carver, 2002; Crissman Ishler & Schrieber, 2002), increased satisfaction with the first year of college (Astin, 1993; Coffman & Gilligan, 2002), improved academic performance (Astin, 1993, Kuh, et al., 2005) and higher levels of persistence (Braxton, 2002; Cuseo, 2010a; Tinto, 1993). Consequently, institutions frequently use formalized peer leadership programs to intentionally bring inexperienced students into contact with their more experienced counterparts, and to facilitate more successful transitions into and through post-secondary education (Johnson, 2002; Terrion & Leonard, 2007; Tinto, 1998).

Over the last few decades, as peer leadership programs have become increasingly common on college campuses, a variety of terms have been used to describe the students who fill these roles, including *leader*, *educator*, and *mentor*. For this dissertation, the term peer mentor (PM) is used to highlight the personal nature of the relationships in the setting where the study was being conducted, as well as the focus on holistic development present in these mentoring relationships (Cuseo, 2010b).

Peer mentor programs have proliferated on college campuses world-wide as institutional leaders have come to understand the value of student-to-student interactions and their positive impact upon student development and academic success, particularly in students' first year

(Ganser & Kennedy, 2012). A great deal of research has identified the positive outcomes associated with PM programs on college campuses for those being mentored (e.g. Astin, 1993; Colvin & Ashman, 2010; Cuseo, 2010a) and, more recently, studies have uncovered the tremendous benefits that come to those who serve as mentors (e.g. Ender & Newton, 2010; Harmon, 2006; Shook & Keup, 2012). Additionally, in a review of mentoring literature, Terrion and Leonard proposed a taxonomy of characteristics of successful PMs (2007), providing helpful guidance to those whose work focuses on the use of PMs to support retention and academic success of new college students. In their review, Terrion and Leonard identified 10 characteristics typifying effective PMs and classified these characteristics using Kram's two-function model of mentoring. According to Kram, mentors perform both career-related (e.g. information-sharing, connections with resources and opportunities) and psychosocial functions (e.g. emotional support, friendship, validation) (1983). Using Kram's model, Terrion and Leonard identified two career-related characteristics of PMs (i.e., program of study and self-enhancement motivation) and eight psychosocial characteristics (e.g. communication skills, empathy, trustworthiness, enthusiasm). Five additional characteristics, which did not fit exclusively into one of the above categories, were identified in the review of literature and were classified as *prerequisites for the student peer mentor*. The characteristics comprising this third group were seen as those traits that program administrators should emphasize in the recruitment and selection process (Terrion & Leonard, 2007).

While this body of past research has effectively described a variety of positive outcomes of PM programs for those who serve as PMs, there are gaps in the literature with regard to how institutions can most effectively facilitate PM learning which not only prepares mentors for their mentoring work, but that also leads to meaningful growth and personal transformation.

Additionally, while past research has provided general descriptions of the types of learning experienced by PMs, very little is known about this developmental process and the way in which PMs experience holistic gains across cognitive, behavioral, and identity domains.

Consequently, the purpose of this dissertation was to conduct a series of studies which, collectively, explored and described the phenomenon of transformative PM development. Transformative learning or development entails a change in an individual's perspective. Mezirow has described this learning as being characterized by a new capacity for autonomous thinking as well as a modified *frame of reference* which is "more inclusive, discriminating, self-reflective, and integrative of experience" (1997, p. 5). Specifically, the group of studies comprising this dissertation examined the ways in which PMs' knowledge and skill grow and expand across their experience, the types of experiences (both formal and informal) which are associated with transformative growth and learning, and the ways in which those who administer undergraduate peer mentoring programs can more intentionally facilitate transformative experience. This dissertation study will then serve as a springboard for a long-term research agenda focused on peer mentoring as a high-impact practice that contributes to twenty-first century learning outcomes (AAC&U, 2011).

Practical significance. Recent research has identified peer mentoring as a key component of the high impact practices necessary for achieving essential higher education learning outcomes, particularly in the first year (Keup, 2012; Kuh, 2008). And, as mentioned briefly above, peer mentoring is a practice that is mutually beneficial for both PMs and the students who are the recipients of this mentoring (Kenedy & Skipper, 2012; Shook & Keup, 2012). Consequently, peer mentoring has a double impact upon student development, making it

a highly efficient and extremely effective practice for improving the student experience. There are few other interventions in higher education that have such a positive duality.

However, the mere implementation of mentoring programs does not guarantee results. Indeed, best practices in first-year experience (FYE) programming suggest that institutions should give careful attention to, not only the student protégés directly served, but also the key agents charged with moving these programs towards their intended outcomes—the PMs themselves. When the development of PMs is neglected, programs are unlikely to achieve their intended outcomes (Esplin, Seabold, & Pinnegar, 2012). As higher education budgets shrink and fiscal resources become increasingly scarce, PM programs are likely to become an increasingly attractive vehicle for institutions to provide wide-spread support to incoming students in a financially feasible way.

Additionally, because the PMs who staff mentoring initiatives are typically undergraduate students, turnover in these positions is generally quite high. Consequently, those charged with administering these programs face, first, a perpetual challenge in finding ways to recruit and select peer leaders who come into the PM role both qualified and well-prepared. Though recruitment and selection are key issues for program administrators to acknowledge and attend to (Esplin, et al., 2012), directly addressing the recruitment and selection process fell beyond the scope of this dissertation. Consequently, the focus has been on the developmental component of PM preparation. In marking off this boundary between recruitment and training, I acknowledge that this is a somewhat arbitrary and academic distinction. In the day-to-day practice of administering a PM program, the line between recruitment and training is much fuzzier. Nevertheless, to provide a focused concentration for the study, recruitment and selection will not be discussed directly in what follows.

There exists a need for high-impact training and development models which not only prepare PMs to perform the basic functions associated with their role, but which bring about more meaningful and lasting changes in PMs' fundamental approaches to learning and interacting with others. When PM training moves beyond merely imparting knowledge or preparing PMs to perform routine aspects of their role and, instead, focuses on supporting PMs in becoming deep learners (Marton & Saljo, 1976), the potential for meaningful personal transformation is increased. And, in participating in these developmental activities and learning experiences, PMs are positioned to integrate their learning into a more cohesive *personal practical knowledge* (Clandinin, 1985) which they can then apply in their PM practice (Marton & Booth, 1997; Tagg, 2003).

Additionally, a developmental approach to PM training helps combat the risk of peer mentoring moving away from being a significant leadership opportunity and becoming a stereotypical "job" where PMs merely clock in and then half-heartedly perform their "mentoring tasks." One of the significant challenges facing those who administer PM programs, particularly those in which PMs are compensated in some way for their service, is protecting the altruistic nature and service ethos of the PM role. By assuming that PM training can and should be a developmental process, institutions can place heightened emphasis upon the intrinsic value of personal growth and encourage PMs to look beyond external incentives that may be provided in exchange for their participation (e.g. stipends, hourly wages, scholarships, letters of recommendation).

Often, institutions respond to the challenge of preparing competent PMs by implementing training that is both formalized and front-loaded. To be clear, initial preparation for PMs is well-advised and helps to bridge the gap between the knowledge, skills, and attitudes students bring

with them, and the abilities necessary for PMs to successfully perform in their roles. However, it is also imperative that institutions attend to the need for ongoing development and continued support of PMs once they enter their practice (Esplin, et al., 2012; Jacobs, Hurley, & Unite, 2008). This dissertation provides a framework for transformative PM learning that can be used by institutions to more intentionally support PM learning and growth across the mentoring experience, as opposed to relying exclusively upon intensive (and often superficial) training experiences administered shortly after PMs are hired or selected. This more holistic and long-term approach to PM development is likely to better support PMs in successfully carrying out their mentoring functions. Additionally, it has the potential to yield cost and time savings for institutions as they find ways to integrate PM training and development into PMs' day-to-day experiences.

Additionally, when PMs are engaged in holistic development activities, they benefit from valuable opportunities to be engaged in the types of applied and experiential learning advocated for by the AAC&U (2009). In its recent report, *College Learning for the New Global Century*, the AAC&U urged institutions to place greater emphasis on providing student leadership and student development opportunities that provide opportunities to learn skills and gain knowledge that apply directly to students' involvement in campus activities and in the surrounding community (AAC&U, 2009 & 2011). Thus, the approach to PM development described here is seen as a means of fulfilling this charge.

Theoretical significance. In addition to acknowledging the practical need that institutions have for effective PMs, this dissertation also makes a theoretical contribution to the scholarly discourse surrounding college student development, particularly by introducing a framework that describes the characteristics of high quality PM learning environments, as well as

a set of design principles for facilitating transformative PM experience. Traditionally, higher education practitioners who capitalize on the power of peer relationships—which not only includes mentoring programs, but also student orientation leaders, resident advisors, peer advisors, peer instructors in first-year transition courses, and many others whose roles are focused on supporting students as they transition into higher education (Cuseo, 2010c)—have viewed their work as being largely concerned with the pragmatics of facilitating successful transitions. When describing their role on a particular campus, these individuals often use terms like “plan,” “manage,” “organize,” or “direct.” In the specific case of PM initiatives, the process of preparing PMs to successfully mentor first-year students is typically referred to as *training*. To be fair, there is nothing inherently wrong with this term or any of the other more simplistic explanations of student affairs work that are referred to above. However, the seemingly reflexive choice of words gravitated to when describing student affairs practice (e.g., train, plan, direct, coordinate) suggests an often hidden (or, at best, unexamined) paradigm that shifts the focus away from finding ways to facilitate meaningful transformations, and emphasizes mechanical and deterministic practice aimed at “fixing” deficiencies in anonymous groups of students (Clark-Unite, 2007).

The particular conceptualization underlying these simple explanations is what might be termed the *utilitarian paradigm*, in that it approaches the task of preparing and supporting PMs as, largely, an exercise in pragmatics and knowledge acquisition (Bunting, 2012). When operating from this paradigm, practitioners concern themselves with the nuts and bolts of the experience and the particular “packets” of reified knowledge that must be communicated to PMs—campus policies, course registration procedures, lists of guidelines for interacting with students, to name a few. Ultimately, from this perspective, PMs are viewed as containers that

must be filled with a set of facts, skills, and values, which once possessed or owned by PMs, equip them to perform “mentoring” on other similarly “unfilled” individuals (i.e., first-year students). The *utilitarian paradigm*, though helpful from a purely administrative standpoint, often results in a fragmented experience for learners, which comes to be viewed as a collection of disjointed events.

In contrast to an exclusive focus on knowledge acquisition and pragmatics, an alternative lens for understanding the process of preparing PMs is encompassed by what I have previously described in other literature as the *aesthetic development paradigm* (Bunting, 2012). Through this lens, emphasis is shifted from the *acquisition* of knowledge through *training*, to the *designing of aesthetic experiences that focus upon facilitating a developmental process* for PMs. This developmental process represents a collection of interwoven experiences that are coherent, connected, authentic, and infused with meaning (Parrish, 2009). Typically, aesthetics are associated with art and perceptions of beauty. However, aesthetics can also describe experiences that are immersive, complete, and transformative. In contrast, experiences lacking this aesthetic component are routine, dispersed, disengaging, and fragmented (Dewey, 1997/1938).

While attending to the holistic qualities of the first-year experience, the *aesthetic development paradigm* also positions practitioners to understand the process of preparing PMs as more than the planning of a series of events for PMs to attend as passive observers, but as a learning experience which invites PMs’ active engagement. In short, from this perspective, PMs are viewed as agentic learners who experience learning through participation in purposeful

activities and who maintain a sense of ownership for their learning by making meaningful choices (Sfard, 1998; Yanchar, 2011).

Timing is also a key issue to consider when considering issues of PM development. Training is often viewed as a one-time perfunctory event that, once completed, does not need to be bothered with. However, the framework described in this dissertation allows for an ongoing process of training, preparation, and development, which stands in stark contrast to “one and done” models focused merely on meeting baseline requirements or conveying large amounts of superficial information. Further, this developmental approach to PM learning is in alignment with a recent exploratory study of peer leadership experiences conducted by the National Resource Center for the First-Year Experience and Students in Transition which concluded that training experiences are becoming increasingly developmental, comprehensive, and ongoing (2009).

This view of learning as a situated and participatory experience can support practitioners in re-thinking their approach to developing PMs and, when understood, invites the field of student affairs to consider how theories of learning and instruction can provide guidance in conceptualizing, planning, implementing, and evaluating experiences that move beyond superficial “training” outcomes and provide opportunities for developmental experiences.

Learning and instructional design theories are rarely applied to problems of student transition (e.g., into higher education, into new student leadership roles), particularly in settings where PMs are used to support first-year students. This dissertation explored the ways in which instructional and learning theories from situated and socio-cultural perspectives of learning could be employed to better understand and describe the phenomenon of PM development. Ultimately,

this study provides a refined understanding for creating programs and institutional spaces where PMs can experience meaningful and transformative growth.

Goals, questions, and the proposed research program. As described above, the purpose of this dissertation was both theoretical and practical in that it involved, first, a description of the phenomenon of PM learning and, then, attempted to use this descriptive work to explore how PMs experienced an intervention intended to facilitate holistic development and knowledge integration. In contrast to a traditional dissertation consisting of a single large-scale study focused on a rigidly-designed research question, this dissertation followed an alternative multi-article format. This approach was selected because it facilitated the preparation of multiple manuscripts for publication in academic journals. Additionally, by conducting a multi-study dissertation, I have positioned myself to undertake a more comprehensive research program following completion of my doctoral studies. Indeed, my doctoral work has initiated a long-term research agenda focused around a cluster of related research questions pertaining to PMs in higher education. The overall goals of this research program are to (a) understand and describe the PM experience, particularly the learning that is integral to and inseparable from this experience; (b) develop a framework that positions practitioners to support and facilitate transformative learning experiences for PMs; and (c) explore the impact of a developmental intervention upon PM learning.

These goals largely emerged from questions about the developmental journeys of PMs, including how they make meaning of their experiences and translate this meaning into growth. Further, having been a PM myself, I have often reflected on the similarities, differences, and tensions I have observed when I view my own experiences alongside the narratives told by the

PMs with whom I work. Using these broad questions as a basis, a set of more focused research questions was identified to give structure and focus to my dissertation research:

- How do PMs experience the process of becoming a PM?
- What types of environments and experiences are associated with transformative learning among PMs?
- How can research in adult learning help to describe the process of PM learning and inform design of environments and interventions that promote holistic learning among PMs?
- How is developmental training, grounded in situated and socio-cultural theories of learning, experienced by PMs?

These research questions provided direction in conducting a series of studies which, together, address the comprehensive research agenda at the core of this dissertation. Ultimately, these studies are intended to make a theoretic contribution to the peer leadership discourse, which then positions others in the FYE community to both understand PM development and be more intentional in creating environments and facilitating learning experiences which support transformations among practicing PMs.

Outlining the Components of the Research Agenda: A Multi-Article Approach

As implied by both the discussion in the Theoretical Significance section above, as well as the research questions just outlined, it was my intention that this dissertation move beyond superficial and fragmented explorations of PM learning, and provide an integrated understanding of the process of PM development. While learning is often defined in ways that reduce it to the transmission of information or the development of narrow sets of skills, it is more effectively viewed as a process of becoming, in which individual learners form new identities and larger

communities of learners renew and recreate themselves (Lave & Wenger, 1991; Wenger, 1998). From this perspective, learning becomes a transformative process in which learners, over time, move toward fuller participation in the discourses of their various communities of practice.

These *discourses* include not only new ways of speaking or writing, but also the adoption of new practices, the creation of artifacts in collaboration with others (e.g., lesson plans among teachers, transcripts of electronic dialogue between researchers, written plans for how to mentor particular students), and, fundamentally, modified conceptualizations of the world in which learners live out their lives (Krippendorf, 2006). In short, this definition of learning describes the process through which learners experience a new way of “being-in-the-world” (Heidegger, 1962, p. 78).

It is from this perspective on learning—as a transformation of individual identity and a move towards increasingly competent participation in the practices of a community (Lave & Wenger, 1991; Wenger, 1998)—that I approached the study. Further because peer mentoring is a complex practice requiring the integration of particular ways of knowing, acting, evaluating and, ultimately, being (van Merriënboer & Kirschner, 2007), it lends itself to a qualitative inquiry conducted from a variety of perspectives, each examining a particular facet of the experience of becoming a PM. As described in the previous section of this chapter, this dissertation both describes PM learning and explores how this learning is influenced by particular types of designed experiences.

Consequently, this dissertation is comprised of a series of related studies, yielding a collection of thematically-linked articles, each making a unique contribution to a more holistic understanding of the phenomenon of PM development. While some overlap is evident across these studies, each study and resulting article has focused on exploring a particular aspect of the overall research agenda. These studies are all qualitative in their approach and place emphasis

on understanding and describing the personal experiences of practicing PMs in particular contexts and from particular perspectives (e.g., skilled practice or knowing) (Hamilton & Pinnegar, 2011; Polkinghorne, 1988; Yanchar, 2011). Though the intent of the collection of studies is not to provide a definitive theoretical account of all PM experience, the qualitative methodologies employed are appropriate for providing rich understanding that might contribute to more refined theoretical thinking about the PM experience. The rich descriptions of the PM learning experience provided in this dissertation, the resulting paradigm for understanding this developmental process, and the descriptions of the interventions developed, position FYE scholars and practitioners to both understand the experiences of PMs in their own place, and be more thoughtful about intentionally supporting PM development in ways that move from *training to transformation*.

Although four individual studies have been conducted, the resulting articles provide an integrated and multi-perspectival understanding of how PMs grow and change through their mentoring experiences. Consequently, this dissertation not only describes what PMs learn or how they change, but also the types of experiences which facilitate this growth. Further, by contributing to a deeper understanding of these phenomena, the studies provide insight into the ways in which experience can be designed or structured to increase the potential for transformative learning among PMs.

The first study (“Understanding the Dynamics of Peer Mentor Learning: A Narrative Study”) focused heavily upon providing a description of the types of meaningful learning experienced by PMs as they support first-year students in their transition into higher education. To do so, the study relied heavily upon PMs’ personal accounts of the developmental changes they observed in reflecting on their experience as PMs. In conducting this introductory study, I

hoped to contribute a general understanding and description of the transformations experienced by PMs in association with their work as peer leaders, including changes in mentoring practice, thinking about mentoring, and personal academic practices. I submitted this manuscript to the *Journal of the First-Year Experience and Students in Transition* in response to call for papers exploring peer education. It was, subsequently, published in a special theme issue of the *Journal of First-Year Experience and Students in Transition* focused on peer education.

With a foundational understanding of the types of growth experienced by PMs, the study for Article #2 (“Stories of Transformation: Using Personal Narrative to Explore Transformative Experience among Undergraduate Peer Mentors”) explored the elements of the PM experience which seem to be most critical in facilitating PM growth. Semi-structured interviews were employed to inquire into the experiences of seasoned PMs and to provide understanding of the nature of those experiences which were most transformative. I submitted this manuscript to the *American Educational Research Journal* in the summer of 2014. The manuscript was not accepted, but I received helpful feedback that will position me to strengthen the manuscript and re-submit it to another publication venue, most likely *Mentoring and Tutoring* or the *Journal of College Student Development* (JCSD).

Through the course of the study for Article #2, it became apparent to me that adult learning theory, particularly Mezirow’s examination of *transformative learning* (1990, 1997) provided a useful theoretical framework for understanding and describing the types of transformations experienced by some PMs through their work. Consequently, for Article #3 (“Transformative Mentoring: Examining the Experience of Undergraduate Peer Mentors”), I conducted a literature review that integrated two bodies of research—(a) transformative learning and (b) peer mentor development—to evaluate the validity of the results reported on in Article

#2 and to provide further understanding of how the mentoring experience can promote transformative learning for undergraduate PMs. This manuscript was submitted to the *Journal of Higher Education (JHE)* in September of 2014. The Associate Editor who reviewed the manuscript, Paul Umbach, responded within a day of my submission to inform me that the scope of the study was a little too narrow for the *JHE*; however, he commented that it was a strong piece on an important issue and strongly recommended that I submit the manuscript to the *JCS*.

Finally, Article #4 was as an integrative capstone of sorts and explored how a designed training experience supported integration of PMs' learning across a diverse set of experiences (i.e., formal training exercises, mentoring practice "in the field," prior experiences with mentoring). In addition, it served to validate the findings of the previous three studies. In doing so, it examined how PMs' informal mentoring experiences, as well as formal training, came together to contribute to a more holistic understanding that guided both thinking and practice in the PM role. I intend to submit this manuscript to the *International Journal of Teaching and Learning in Higher Education* later this year.

While each proposed article focused on a somewhat unique aspect of the research agenda, viewing these studies alongside one another provides a more comprehensive understanding of the transformative possibilities associated with being and becoming a PM and the process through which this transformation can occur. Together, the four articles provide descriptive theorizing about the transformative impact of the PM experience upon the mentors themselves. Thus, the ultimate objective of the dissertation has been to provide a new set of "tools for thinking" (Thomas & James, 2006, p. 774) that positions both scholars and practitioners to approach PM development more intentionally.

Article #1: Understanding the Dynamics of Peer Mentor Learning: A Narrative Study

Understanding the Dynamics of Peer Mentor Learning: A Narrative Study

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Abstract

Although there is a growing body of research on the effects of peer mentoring in higher education, the individual learning of mentors themselves is largely unexplored. In this narrative inquiry study, peer mentors working with a first-year learning communities program shared and analyzed stories about their experiences. The resulting narrative data were then analyzed in an inductive-deductive and iterative process. Three themes emerged from this inquiry. First, peer mentors' stories revealed that they learned through observation and self-reflection, and that this learning led to changes in their own practices as students. Second, mentors learned how to facilitate learning among first-year students by building community and attending to interpersonal relationships. Third, as mentors struggled to help their protégés transition into and through their first year, they learned how personal responsibility and individual choice influence the learning process.

Keywords: first-year experience, learning communities, narrative, peer mentoring, reflection

Understanding the Dynamics of Peer Mentor Learning: A Narrative Study

Recent research in higher education has identified key features of learning environments that promote meaningful student learning. The use of peer mentors (PMs) is a practice that integrates a number of these features to support student success. Indeed, optimal learning environments are student-centered, facilitating students' active engagement in the learning process, and also consider cognitive factors by encouraging students to connect new knowledge with prior experience and by promoting metacognition (Entwistle, 2000; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2007; Pascarella & Terenzini, 1991). Peer mentor programs have the potential to create such environments by providing opportunities for collaboration, developing a sense of shared purpose among learners, helping students consider diverse perspectives, and encouraging frequent reflection on the learning process (Topping, 1996).

Similarly, Tagg's (2003) work on institutional culture suggests that adding a PM within a first-year learning community has the potential to "heat up" the cognitive economy for both first-year students and their mentors. According to Tagg (2003), "hot" cognitive economies facilitate improved learning by structuring the undergraduate experience in ways that place emphasis on intrinsic goals, promote high levels of cognitive activity, provide frequent opportunities for reflection and feedback, and contribute to a sense of community among learners. The work of a PM, then, is to leverage these institutional attributes by making them visible and relevant for students. In the process, PMs become aware of these institutional features, capitalize on them, and improve their own learning. Ultimately, because the mentoring experience has the potential to create productive learning environments for all participants, both mentors and protégés are positioned for powerful learning experiences.

While the literature on the effects of mentoring on those who are mentored is growing (Eby & Lockwood, 2005; Noe, Greenberger, & Wang, 2002; Topping, 1996), and some models describing potential benefits for mentors have been developed (e.g., Delworth, Sherwood, and Cassaburi, 1974), literature on the actual learning of mentors themselves is limited. In our experience working with PMs in a first-year learning community program, we were impressed by the frequency with which they reported learning far more than the first-year students whom they mentored. The purpose of this study, then, was to explore what PMs' personal narratives about mentoring might reveal about what they learn, how they learn it, and how this learning influences their mentoring work.

Method

Participants

Eighteen undergraduate PMs in a first-year learning community program at a large, private, faith-based institution in the western United States participated in this study. Participants ranged from sophomore to senior level, with 7 males and 11 females. Nine were experienced PMs (i.e., had worked as PMs for one or more years); nine were first-time mentors.

Context for the Study

Each PM worked with a learning community of about forty students who were enrolled in a cluster of linked courses. Theoretically grounded in the work of Smith, MacGregor, Matthews, and Gabelnick (2004), these learning communities included a constellation of best practices (e.g., student-faculty interaction, connections with residence life, and group study), rather than a single high-impact practice (Kuh, Kinzie, Schuh, & Whitt, 2005). The PMs in the program helped to integrate these components of the learning community experience. Consequently, their responsibilities included meeting individually with students 2 – 3 times per semester; attending

learning community classes with protégés; connecting students with faculty members; supporting protégés in developing effective academic habits by facilitating study groups and holding academic workshops (e.g., note-taking, exam preparation, time management, etc.); facilitating peer-to-peer connections; and assisting protégés in accessing key campus resources (e.g., academic advisors and teaching assistants). Mentors worked 15 – 20 hours each week and spent the majority of their work time engaging in conversations with students regarding their academic progress and following up with faculty members regarding struggling students.

Peer mentors participated in extensive training, including an initial orientation held in the spring prior to the academic year during which they would work as PMs; summer training, which included readings, written reflections, and online group discussions focused on issues of transition, high-impact FYE practices, and approaches to facilitating change; and a week-long fall training workshop, held prior to the beginning of the fall semester. Fall training was designed to familiarize PMs with program and university policies, make them aware of campus resources available to freshmen, and outline their job responsibilities for the coming semester. This workshop also provided opportunities for PMs to practice interpersonal skills and discuss case studies in small group settings. Additionally, PMs and program administrators met together weekly during the fall semester to share ideas and to learn from new challenges that arose.

Data Collection

Our research design was based in narrative inquiry practice (Clandinin & Connelly, 2000), with PMs assuming the role of both participants and researchers. They composed field texts, which took the form of stories, and then worked collaboratively to interpret the meaning of their stories by composing interim research texts.

Peer mentors were organized into story-telling groups of threes. Each group participated in three phases of a story cycle: one phase of story-telling and two subsequent phases of story analysis. During the first phase, participants were asked to write a story about their experience as a PM by responding to one of three prompts dealing with insights gained, changes in protégés, or personal identity and integrity. In the second phase, members of each group read one another's stories and were asked to identify commonalities and unique themes. In the third phase, participants read the reflections written by members of their group and performed a second-layer meta-analysis of the stories. Peer mentors then wrote final reflections which identified and considered the similarities and differences in the meanings members of the group had derived from their interpretation of the stories in phase two. This resulted in the development of interim research texts.

Analysis

Researchers holistically analyzed three layers: story, response to story, and response to response. This analysis proceeded in an inductive-deductive and iterative manner wherein each researcher independently identified themes in a set of reflections. Researchers then compared their analyses and negotiated differences that arose. After identifying the themes that emerged across a set of reflections, researchers collectively identified evidence illustrating and supporting these themes. Next, using the themes that emerged in the first set, the second set of narratives were coded. Researchers then met again to negotiate findings, collapsing new themes with those previously identified and adding new themes that emerged. Through this process, sub-themes were eventually integrated into three main themes which best described the learning evident in the narrative data.

After this second analysis, researchers employed a cross-case analysis method and tested whether the overall set of themes identified in previous analyses could be used to code the first set of stories and responses. This approach of interpretation, negotiation, and reinterpretation, was employed by researchers to develop more trustworthy findings. When the above analyses concluded, researchers met with all 18 participants and asked them to code their responses using the refined themes identified previously. Doing so yielded a set of refined themes that participants could support.

Findings

Three main themes were identified through the analysis process described above. First, PMs learn vicariously from the experiences of their protégés. As they reflect on their interactions with freshmen, they frequently apply their new understandings to their own lives. Second, PMs learn how to influence others to make positive change. They develop skills and dispositions which increase their efficacy as agents of change and, over time, come to see themselves as community builders. Third, PMs gain new understanding of the critical role of personal responsibility in individual learning and strengthen their sense of responsibility for their own academic experience.

Vicarious and Self-Reflective Learning of Peer Mentors

PMs reported learning through observing the struggles of their protégés, reflecting on these observations from a third-person perspective and then modifying their own behaviors and attitudes. Jennifer's story illustrates this process. A professor in her learning community had a reputation as an excellent teacher; however, as Jennifer observed initially, the professor had high expectations:

He gave the students a lot of responsibility for their own learning and expected much from them. . . . The students, being freshmen, were frustrated by this because it was so different from the normal lecture/take-notes teaching style they were used to. They came to me complaining, and I in turn complained as well. . . . It took me almost that whole semester to [realize] that style of teaching was exactly how students learn best. . . . They must take ownership . . . for their own learning. . . . Since then, I have taken it upon me to adopt this same mentality in my studies. (Jennifer 1a, Dec. 2004)

Jennifer talks about adopting a new perspective, which prompted a re-evaluation of the professor's teaching style and new insights about the responsibility she had for her own learning. First, because of her position as a PM, she was forced to step out of her traditional student role, becoming a third-person observer of her protégés and her own experiences. Although she began by questioning the methods of the professor, from this modified perspective she was able to observe the unproductive attitudes of her students, eventually gaining insight into the value of inviting students to take ownership for their learning. Ultimately, these observations and reflections led her to revise her attitude towards her own learning. It was not until Jennifer began to see discrepancies between her own mindset and the one she hoped her protégés would take up, that she modified her own approach to learning and adopted a new mindset. Comments in subsequent responses of the story cycle process suggested that this change resulted in an improved approach to learning that included assuming personal responsibility, connecting past and current experiences, linking related concepts, and applying her learning to her future plans, all characteristics of what researchers have termed "deep" learning (Marton & Saljo, 1976; Tagg, 2003) and which typify the sort of student learning to which virtually all institutions aspire.

Other PMs reported similar changes and attributed this growth to their regular reflection on what one PM described as the “gap” between the PM point of view and that of the “average” student. Peer mentors often reported they had once viewed learning in ways similar to their protégés; however, because of their experiences as PMs, they had developed a greater sense of responsibility for their own learning.

Peer mentors drew upon a rich “bank” of student experience which included not only their own past experiences, but also the experiences of the protégés with whom they worked. This store of experience repositioned them to identify the links between student behavior and specific learning outcomes. Katie shared a story about facilitating a study group in which, initially, group members merely sought to find answers to potential test questions, ignoring fundamental course principles and concepts. Eventually Katie helped them reconsider their approach and they began to teach one another and link their learning to their own experiences. In observing this change, Katie reflected on the results:

The students who had participated in the discussion seemed much more confident about their knowledge. It was an interesting contrast to see how the five students who actively discussed the topics had a different demeanor at the end of the session than did the girl who anxiously tried to scribble down everything they said. She was still very worried about the test when she left. If only she had tried to participate in the discussion! She would have felt much more prepared because she would have actively applied what she was studying. (Katie 1a, Jan. 2005)

Because of Katie’s personal experience, she was able to recognize the cramming strategy employed by her students, as well as its limitations. Across the stories, an initial sub-theme emerged wherein PMs frequently reported observing protégés struggle with poor choices.

Through subsequent analysis it then became apparent that PMs re-interpreted these observations based, in part, on their readings and discussions from PM training meetings.

Repeated observations of protégés' experiences, coupled with what PMs were learning about student success, led to meaningful growth. Jacquelyn's story indicates how this repetition influenced her practices as a student:

Often while having interviews with students, I would ask them to make a list of their priorities and then we'd talk about how when one realizes where their priorities are, they will be more apt to spend time on those areas. Of course, since I asked my students to do this, I also filled out a sheet on my priorities. . . . As I had more of these interviews with students, I would reflect again on my priorities and how I spent my time accordingly.

This semester, I've had a habit of constantly re-evaluating my study habits, time management, the efficiency of my study . . . and other areas along these lines. I think that this habit was sparked by having the subject brought up recurringly [sic]. (Jacquelyn 1a, Dec. 2004)

As Jacquelyn regularly talked with students about their priorities, she was invited to self-reflect. This experience led her to develop a habit of regular self-evaluation, which led to subsequent changes in her academic habits.

Counseling with protégés, reading work on successful student practices, and applying their reading to their experiences as students and mentors helped PMs change in important ways. New assumptions emerged as PMs witnessed protégés' experiences and then interpreted what they were seeing based on the theoretical learning acquired during their training. They reported that seeing their protégés live out the principles they were reading about brought these lessons to

life. One mentor called this contextualized learning “working through the details” and compared it to doing practice problems in a course.

Facilitating Change through Developing Community

Peer mentors rightly refer to themselves as “agents of change.” Working to help groups of first-year students grow teaches mentors how to facilitate change within a community. Often, PMs begin with a belief that they will change struggling protégés, but in time, most come to see their role as interconnected, relational, and reciprocal. Rather than externally imposing change, they learn to see themselves as [sic] “person’s [sic] of influence”—to use the words of one mentor—who influence others’ choices in supportive ways. For the majority of stories analyzed, initial sub-themes relating to the processes of change (e.g., empathy, listening, helping students to feel known) emerged as PMs reported developing a nuanced understanding of how and why students change. However, through continued analysis and negotiation of themes, the authors observed that when mentors take up this more sophisticated perspective, they begin to see that they can support protégés in changing by establishing relationships, providing access to community resources, and inviting engagement in meaningful reflection. These sub-themes were then subsumed by the overarching theme of facilitating change by building relationships among community members. Zina talks about an experience that helped her redefine what it means to lead in this way and which illustrates this theme:

An experience at the beginning of the semester reshaped my views on my role within the community. My students . . . were quite dismayed to receive the results of the first exam. . . . A few days later, a student approached me and told me that his friend [Brian] was really having a difficult time with his grade on the test. I promised to talk to [Brian], feeling chagrined that I had missed [Brian’s] distress. . . . While working through

[Brian's] problems with him, I began to realize that his friends were much more influential than I was. Our community was bigger than him and me. I began to realize that I could only be a leader as part of the community. . . . As the most experienced member, it's right that I should often take the lead. . . . However, 'community' means that all of the members are equally important and influential. (Zina 1a, Dec. 2004)

In reconceptualizing her understanding of leadership from being the actions of a heroic individual to facilitating a collective and shared process, Zina was liberated from the burden of “owning” the problems of others. She turned her attention to connecting rather than remediating and used the resources within her community to support individual protégés.

Peer mentors' capacity to influence others within the community often increased as they came to understand processes of change and the personal qualities they would need as agents of change. In one story, Katie describes a protégé who was hostile towards a particular class. When the professor asked Katie to bring together a variety of students to give periodic feedback on the course, this hostile protégé was invited to participate. As she watched this student share her concerns with the professor, Katie learned about the importance of recognizing individual voices within the community. She talks about her protégé in this way:

As she attended these sessions, I could see a change in her attitude. Though she never enjoyed the class, she gained an appreciation for what she was being taught through it. I also noticed that she openly communicated with the professor and told him her thoughts and feelings about the class and how it was run. This change continued over the semester. In the first interview I had with her, she was quite hostile towards me and I thought that she would be one of my distant students who would not respond to me. At the end of the semester, however, she referred to me as her friend and she would come to

me with questions and ask for guidance. This experience taught me several things. First, I learned that it can become easy for a peer mentor to write a student off. I was certainly ready to write this girl off as a troublemaker. . . . I learned that she was actually a very nice girl who just happened to be very frustrated when she met with me. I learned the importance of meeting with students and listening for what is bothering them. If we just maintain a superficial relationship with our students we cannot truly help them. (Katie 2a, Jan. 2005)

Katie's encounter with a student who transitioned from incivility to civility helped her to understand the power of listening in building individual relationships and how dialogue strengthens connections among community members. Katie then reconsidered the reductionist labels she had used with her protégés and learned how to negotiate conflict, engage in rational discourse, and provide her protégés with opportunities to be heard.

Listening is only one tool PMs develop. In fact, it could be seen as a more specific instantiation of the sub-theme of empathy or caring. Repeatedly, PM stories and analyses described the importance of individual care in helping protégés choose to change. Mentors came to understand that resistance to change is increased when individuals feel invisible or misunderstood. In Katie's reflection on her experience with the hostile student and similar stories from other mentors in her group, she made the following observations:

A commonality that we noticed was that people want to be recognized individually. In a sociology class I learned that people are what they think you think they are. This is called the "looking-glass self." When a peer mentor or a professor reaches out to a student the student begins to feel like he is important. This perception will cause the student to begin to treat himself like he is important and to begin taking more

responsibility for himself because he realizes people depend on him. This is true not only for students but it is also true for every individual. We all need to feel like we are needed Sometimes it is hard for a peer mentor to get to know each individual student well. It is still important, however, for the student to know that the peer mentor is there. As Susan mentioned, she said hello to one of her students by name. Just knowing that someone knows your name is very important to a person's sense of self. It lets them realize that someone else knows they are there. (Katie 2c, Jan. 2005)

Katie articulates how mentors learned to influence protégés by drawing on the innate human desire to be acknowledged (Terrion & Leonard, 2007). Susan and many other mentors addressed the sub-theme of quickly learning students' names at the start of a semester as one way of doing just that. Katie, as well as other mentors, also learned that helping students gain a sense that they could make meaningful contributions to the lives of others—their ability to give love—is another important means of influencing change (Terrion & Leonard, 2007).

From watching protégés struggle repeatedly with the same problems, mentors realized that change can take time. One talked about how choosing to change was not a one-time event, but a continual process of choosing and re-choosing. Rather than focusing on outcomes, she learned about the importance of simply getting the process of change into motion. In the same way, mentors learned to view learning as a process. They learned that people and contexts are dynamic and that PMs must be continually attentive to opportunities for intervention. Facilitating change in others came to mean engaging protégés in reflection rather than providing answers. As one PM reported, questions and discussion are “tools to growth because the process of peer mentoring is more of a leading the students to know how, not necessarily what.”

This sub-theme of patience also closely relates to mentors' realization that there is no one-size-fits-all solution or fool-proof approach to protégés' problems. Peer mentors live in tension as they are responsible for the growth of other students and yet must come to understand that they cannot force others to change or grow. From this tension emerged an increased tolerance for ambiguity and an understanding that trust is a vital part of human interactions. Peer mentors frequently mentioned that they often had to give up control, trusting that their efforts to build relationships and establish community would lead to meaningful growth for protégés.

As PMs learn to see themselves as facilitators of change, and as they develop the characteristics and abilities that enhance their capacity to influence others, their sense of efficacy grows. Several recalled feeling a sense of uncertainty when they first became PMs and compared themselves to other PMs. Initially, they doubted their ability to support and benefit protégés; however, their confidence grew as they came to understand that they were not isolated individuals, but rather part of a rich community network made up of diverse individuals who could offer additional support to protégés, beyond what the PM could in isolation.

Personal Responsibility in Learning

Peer mentors' stories were saturated with the theme of personal responsibility. As they worked to support protégés, they repeatedly encountered resisters. Through these experiences, PMs frequently came to understand that students have ultimate sovereignty in matters of learning. Brian's story provides an example:

I had a student who was very intelligent and made worthwhile comments in class. Soon, though, he began to miss class quite a bit. I found out from his roommates that he was playing computer games all night long, after which he would sleep through his morning classes. I approached him about his absences, and he admitted to sleeping in. But he

didn't admit his [computer] problem, even when I gave him several chances to tell me why he kept sleeping in. . . . Also, even though I talked to him about it and encouraged him to come to class, and even though he agreed that he would do just that, he ended up not really finishing the semester, getting less than a 2.0 GPA. I learned that . . . even with encouragement and support, students often choose to continue in the same course they've been heading in. (Brian 1a, Dec. 2004)

Brian's frustration with this student's refusal to own his problems was echoed again and again in the stories. Brian, as well as other PMs in the study, reported that they were not positioned to help until struggling freshmen were willing to be completely honest about their own behaviors. One of the most common lessons voiced in these reflections was that PMs cannot force a student to learn, accept help, change, etc. Jacob, a particularly eloquent PM, said it this way:

The beautiful, but difficult, thing about learning is that we have to choose to learn. It cannot be forced from outside. As peer mentors, we can give advice, suggestions, and try to help our students think through what they are doing. But, we cannot make them change. (Jacob 4, Dec. 2004)

Mentors repeatedly told how protégés' sense of personal responsibility influenced their learning. Furthermore, when PMs were successful in facilitating change, they almost always attributed success to the protégé accepting responsibility for their own learning. As Jacquelyn reflects on stories of student change, she offers the following thoughts:

In all three responses we noted that the students had to come to the point where they realized they needed to make changes and solidify the decision to make choices themselves. It seemed that the greatest amount of impact for change came from the

students themselves rather than from a peer mentor, teacher, or fellow student.

(Jacquelyn 2c, Dec. 2004)

Most PMs reported coming to believe that each of us is ultimately responsible for our own learning. And, because PMs were vicarious learners, they were likely to apply this lesson and assume more responsibility for their own choices.

Even after they learned this lesson themselves, PMs often struggled to help protégés accept responsibility for their own learning. Zina told a story about a new student who was struggling academically. The student came to her with his problem but seemed to blame everyone else for his performance. Zina responded in this way:

[Matt] seemed surprised when I said that there were ways to deal with his roommate, his friends, and his misunderstandings of the assignments. He'd been taking it for granted that everyone else was supposed to make his life easier, without taking any responsibility for it himself. . . . I asked him if he could think of any ways to deal with his problems, and we had a really good discussion. Once he decided to take responsibility, he had some really good ideas. He left the interview with a brighter outlook and fresh perspective.

When I spoke to him later, not everything was perfect, but he was making progress and learning how to deal with new obstacles as they came. (Zina 2a, Jan. 2005)

Zina repeatedly encountered this principle in the varied contexts of students' lives. In her story about Matt, she elaborates supporting evidence for her understanding. Observing his growth and progress provided validation for her new understanding of the need for protégés to take personal responsibility for their learning.

Sometimes teaching protégés to accept responsibility means mentors must learn to help them consider the consequences of their choices. For example, John reported having told new

students that they were *not required* to attend new student orientation because he wanted to acknowledge them as adults with the ability to choose; however, when none of them showed up for orientation, he realized that in addition to recognizing their freedom to choose, he needed to help protégés think through the consequences of their choices. He learned that in doing so he would help them be “adults in a different way.”

Peer mentors also reported feeling great responsibility for the learning of other students. This sense of responsibility was identified by several mentors as the factor that drove their own personal reflection and change. Jennifer talked about how this sense of responsibility changed her entire approach to her university experience:

Previous to being a peer mentor I was a student who did only what had to be done in order to get an 'A'. . . . When I became a peer mentor, though, my whole academic focus changed. Through all of the training we did on understanding how to learn effectively, I became aware that the way I had previously been going about my studies was not acceptable. . . . Then, as I actually started mentoring my students, I realized that not only was I accountable to myself for being a successful learner, but I was also accountable to my own students to serve as an example for them This was a very influential turning point for me and I gradually began to change my practices. . . . I was able to become the type of learner that every college student has the responsibility to be.

(Jennifer 3a, Dec. 2004)

Jennifer first became aware of her need to change her approach because of her training; however, it was her recognition of herself as an example that was the turning point in her own behavior. As PMs in the study became aware of themselves as examples, many talked about feeling a need to align their own practice with the advice they gave protégés. Note how often

Jennifer mentions being responsible or accountable in her brief account. Mentors talked explicitly about responsibility in most of their stories, even though they were never prompted to address this theme.

Discussion

When we began this study we were interested in understanding the development of PMs in terms of both how and what they learn. While simple interview methodologies have been used in past research to examine what PMs learn through their experiences (e.g., Harmon, 2006), the present study used a unique narrative analysis of a story cycle process. Further it revealed that directed written reflection can position PMs to act as reflective practitioners (Schön, 1983), learning vicariously about being successful university students from the experience of their protégés and their PM colleagues. This finding extends the results of a previous study in which researchers found that peer instructors experienced a variety of behavioral changes that led to increased academic success in their role (McKinney & Reynolds, 2002). However, the narratives collected and analyzed in the present study shed greater light on how these changes occur. The stories of the PMs in the study suggest that peer mentoring has tremendous potential to be an active, reflective, collaborative, and authentic learning environment.

As PMs work to help protégés change, they come to understand their own place as change agents and describe their role as one of building relationships and supporting individuals, rather than forcing them to be a certain way. This finding is supported by previous studies indicating that successful peer mentoring includes a focus on using relationships as a tool for molding the development of the students being served (Ender & McFadden, 1980; Rice & Brown, 1990). Additionally, PM comments regarding the necessity of exercising patience as they wait for protégés to choose to change align with findings suggesting that meaningful

protégé growth occurs through sustained effort by PMs (Ender & Newton, 2000). These findings would seem to have significant implications for those concerned with the civic and character development of postsecondary students, including student life and academic advisement professionals.

Perhaps the most significant finding, however, was the way in which the theme of personal choice and responsibility permeates PM learning. First, PMs feel a unique responsibility for the welfare and growth of their protégés, and this sense of responsibility strengthens and gives purpose to their own learning and development. This type of learning addresses what Gong (2002) has suggested is an essential element of the educational problem—helping students to learn for the purpose of teaching others—and is echoed in earlier studies of PM learning (e.g., Good, Halpin, & Halpin; 2000). Second, in struggling to help students who resist help, mentors become acutely aware of the sovereignty of personal choice and learn about the importance of self-efficacy in student success. Third, the interpersonal characteristics and skills developed by PMs hinge on a recognition of the protégés' inherent need to be treated as rational, competent, and responsible agents. Fourth, by acting as self-reflective third-party observers of student experiences, mentors vicariously learn about the choices they can make to better facilitate their own learning.

This study illustrates how being a PM can promote young adult development in unique ways. Unlike a teaching assistant or a tutor, a PM focuses not only on course content but, more importantly, on the processes of learning and the development of life habits. This focus on processes and holistic development can facilitate PMs' personal learning and growth in ways beyond what might typically be experienced in other student support roles. In their work with novice students, PMs find themselves somewhere in the liminal space between the typical

student role and the role of instructor. Consequently, they are well-positioned to observe how personal responsibility for one's learning, and the resulting choices a student makes, impact their overall growth and development. This shift away from their more familiar student role contributes to a particularly effective learning experience. It invites PMs to assume new identities as learners and to participate in the learning process in unique ways, both facilitating personal transformation (Wenger, 1998) and honoring the principle that "learning cannot be separate from identity development" (Smith, MacGregor, Matthews, & Gabelnick, 2004, p. 13).

Limitations

This study was limited to a relatively small number of PMs participating in a unique learning community program at a single institution; consequently, the findings discussed here may not have applicability for all institutions that use PMs. Additionally, because of the somewhat unique nature of the institution where the study was conducted (e.g., a selective, faith-based institution), the demographic characteristics of the first-year protégés in the study are likely to differ from first-year students at other institutions. However, in choosing to pursue a study based in narrative inquiry, we were well aware of these limitations and chose this design because of its potential to yield rich descriptions of PM learning.

Recommendations for Future Research

Given PMs' perceptions that mentoring is deeply transformative, it is important that future research develop a more detailed analysis of the specific aspects of the PM role which give rise to learning. Researchers might consider which types of mentoring interactions are most productive, building on the four dimensions of a tutorial relationship (Rapoport, Yair, & Kahane, 1989) and the literature on constructing "hot" learning economies in higher education (Tagg, 2003). Identifying principles of effective mentoring will not only assist those responsible for

supporting first-year students' transition into higher education, but also holds potential for shaping the way that we think about college student development more generally.

Future studies could be conducted with a larger sample of PMs and across a variety of institutional types to yield broader applicability for findings. Additionally, studies which examine PM learning across a variety of types of mentoring programs (e.g., programs where PMs are embedded within learning communities, facilitate student success courses, provide mentoring independent of a particular course, etc.), or which make comparisons of PM learning to the learning of student leaders who serve in other positions of support on campuses (e.g., teaching assistants and resident assistants), would be of benefit. Finally, this study described a particular type of mentor learning and used a qualitative methodology. Understanding of PM learning would be improved through future studies which employ quantitative methodologies to measure gains in mentoring skills, characteristics, or attributes, particularly those which align with learning outcomes or character development goals commonly cited in institutional aims and mission statements.

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**Article #2: Stories of Transformation: Using Personal Narrative to
Explore Transformative Peer Mentor Learning**

**Stories of Transformation: Using Personal Narrative to
Explore Transformative Peer Mentor Learning**

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Abstract

While past research has suggested that undergraduate peer mentors benefit from mentoring their peers, little research has examined how this experience is associated with transformative learning. This study uses narrative analysis of authentic mentoring stories to explore how particular types of mentoring experience contribute to transformative learning for the peer mentors of first-year students. Findings suggest that transformation is more likely when PMs engage in meaningful routines and everyday practices; practice purposeful “pretending” in the unfamiliar aspects of their role; embrace challenge and surprise in their practice; regularly reflect on their experiences; and are mentored by supportive faculty and staff. Findings have implications for peer mentor selection and training, as well as peer mentoring program design.

Keywords: critical incidents, legitimate peripheral participation, peer mentor, peer leader, transformative learning

Stories of Transformation: Using Personal Narrative to Explore Transformative Peer Mentor Learning

It was late on a Thursday night during my first year as a doctoral student and, for what seemed like the third time in the last month, my wireless mouse had died. Standing there in front of the office supply closet, I wondered why batteries die so often and always late at night when people still have so much to do.

When I was young my teachers told me I was “smart” and that I would become someone important, like a doctor. But, my four year-old daughter’s story of my becoming a doctor was slightly different. One Saturday afternoon, in the midst of my failed attempts to remove a very large splinter from her very small foot, someone jokingly said “what we need is a doctor.” To which my daughter quickly replied: “My dad’s going to be a doctor, but not a doctor who helps people—a doctor who reads books.” As I stood there looking into the closet on that late Thursday night, I started to wonder who I was becoming and if it really meant anything.

Continuing my search for batteries, I noticed a pair of misplaced orange-handled scissors that, based on their faded hand-written label, were supposed to become the scissors for “Station #5.” I wondered where Station #5 had been and then noticed that the writing on the scissors looked strangely familiar.

In that moment, I remembered an afternoon six years earlier when I was working in that same office as an undergraduate peer mentor to first-year students. The office secretary had assigned me to label all the orange-handled scissors so we would know where they belonged. As I drew this memory forward, I laughed to myself. There I was, standing in the same place, holding the same scissors. Then, I paused, and began to see that in being a peer mentor in that office, I had become someone new.

Though this narrative describes the unique experience of one author of this study, it is representative of the ways in which we have each been transformed through our experiences as mentors. As we have administered peer mentoring programs for first-year students, mentored graduate students, and been the recipients of our own mentoring from colleagues, we have observed the powerful influence that being and becoming a mentor can have on one's personal development. These personal experiences, as well as relevant literature discussed below, are what brought us to this inquiry.

While past research has linked the experience of being a peer mentor (PM) with a number of positive outcomes (e.g., Ender & Newton, 2010; Landrum & Nelsen, 2002; Russel & Skinkle, 1990), the majority of these studies document PM learning within narrowly-defined domains. For example, studies have reported on PMs' gains in discreet academic abilities, such as time management and written communication (e.g., Keup, 2010; Landrum & Nelson, 2002); improved interpersonal skills, including group facilitation (Russel & Skinkle, 1990) and relationship-building (Badura, Millard, Johnson, Stewart, & Bartolomei, 2003;); and positive social outcomes, such as feelings of belonging and empathy for others (e.g., Keup, 2010). A smaller number of studies have suggested that PMs may also experience more holistic growth that extends across domains, and which is characterized by significant reconceptualizations of what it means to learn, teach, or mentor (Bunting, Dye, Pinnegar, & Robinson, 2012; Garza & Ovando, 2012; Harmon, 2006). Nevertheless, little is understood about the nature of this more encompassing growth, or the particular aspects of the PM experience that might facilitate deeper and persistent learning.

Although the literature on mentor learning has just begun to explore the transformative potential of being a PM, transformative learning as a more general phenomenon has been well

addressed in research on adult learning. Transformative learning theory (Mezirow, 1990) describes learning experiences that facilitate adult learners' personal transformation and bring about fundamental changes in perspective. Mezirow (1997) asserts that this learning is characterized by a new capacity for autonomous thinking, with a modified frame of reference that is "more inclusive, discriminating, self-reflective, and integrative of experience" (p. 5). Transformative learning occurs through experiences that challenge learners' assumptions, promote reflection, and ultimately lead to a permanent shift in a learner's identity, wherein they come to think, feel, and act in new ways.

Though the literature on PM learning does not directly address the transformative aspects of PM experience, there are indications that being a PM leads to the type of growth described by transformative learning theory. We add to this body of research on PM learning by examining the *process of* PM learning, as well as the ways in which PM experience contributes to personal transformation. Using narrative inquiry methods (Clandinin & Connelly, 2000), we investigated the stories PMs tell about their learning in order to better understand the nature of transformative PM experience.

Literature Review

As peer leadership programs have become increasingly common on college campuses, a variety of terms have been used to describe the students who fill these roles, including *peer leader, peer educator, and peer mentor* (Cuseo, 2010; Ganser & Kennedy, 2012; Kenedy & Skipper, 2012). While their titles may vary, these student leaders perform similar functions, including (a) connecting students to university resources; (b) serving as a role models; (c) providing academic assistance; (d) advocating for students; and (e) offering social support (Colvin & Ashman, 2010; Cuseo, 2010). The participants in this study were referred to as *peer*

mentors (PMs) to highlight the personal nature of their leadership, and their role in providing holistic support and guidance to mentees (Cuseo, 2010).

Although the primary purpose of PM programs is to promote positive outcomes among mentees, it has become clear that PMs also benefit (e.g., Bunting, et al., 2012; Ender & Newton, 2010; Harmon, 2006; Shook & Keup, 2012). Peer mentors have reported gains in isolated areas, including interpersonal skills (Russel & Skinkle, 1990; Shook & Keup, 2012), academic abilities (Landrum & Nelsen, 2002), and affective domains (Keup, 2010). Further research has suggested that being a PM may contribute to more holistic personal transformation (Harmon, 2006). However, further study is needed to explore the particular elements of the PM experience which facilitate this type of learning (Kenedy & Skipper, 2012). Our study responds to this call by examining the narratives one cohort of PMs shared to describe their development during their time as PMs.

Theoretical Framework

Legitimate peripheral participation. Definitions of learning focusing heavily on behaviors, cognitive processing, or knowledge acquisition seem inadequate in describing the shifts in identity frequently observed in practices such as peer mentoring. In contrast, *legitimate peripheral participation* (Lave & Wenger, 1991) emphasizes the experiential, social, and contextual nature of learning. Because of its alignment with the holistic growth observed among some PMs, we have relied upon this framework to guide our study and inform our resulting understanding of their experience. Accordingly, we assume that “learning transforms who we are and what we can do” and that “it is an experience of identity” (Wenger, 1998, p. 215).

In contrast to acquisitionist perspectives on learning like those described by Sfard (1998), legitimate peripheral participation (LPP) defines learning as the process of gaining membership

in a community of practice, where a group of individuals participate together in shared activities built around a common purpose or objective (Wenger, 1998). From this perspective, learning is defined as the process by which individuals come to participate in the ongoing practices of a community, and do so in increasingly skillful and intentional ways.

Though LPP might be viewed as a composite theory, made up of isolated concepts (i.e., legitimate, peripheral, participation) that can be considered independently, according to Lave and Wenger, it is best understood as an integrated framework (1991) that includes three interrelated components. *Legitimate* refers to the importance of providing newcomers with opportunities to participate in meaningful and relevant experiences (Lave & Wenger, 1991), thereby developing increasing competence and familiarity with the knowledge, activities, and discourses that make up the communities practices.

Peripheral implies that communities of practice have no center; thus, learners occupy dynamic and changing positions and have access to a broad range of people, resources, and practices within the community (Lave & Wenger, 1991). This access is critical because it positions newcomers for growing involvement and competence. Indeed, participating in peripheral ways provides learners with access to a comprehensive view of the *telos* of the community—its overarching purposes and aims (Aristotle, trans. 1962)—which then becomes a guiding influence for wise decision-making and practice (Schwartz & Sharpe, 2010).

Finally, *participation* emphasizes, as does Sfard's *participation metaphor* (1998), that learning is a process of engaging in the ongoing practices of a community (1998). Specifically, *learning* occurs as novices take up new identities by participating in meaningful practices (Lave & Wenger, 1991; Wenger, 1998).

Transformative learning. From a constructivist perspective, learning is an ongoing process of developing and refining one's frames of reference. As learners integrate assumptions from prior experiences with their present circumstances, they develop increasingly dependable assumptions that then inform and guide subsequent learning experience (Driscoll, 2000). While much of experience may confirm previously held assumptions, or require only slight modifications of pre-existing frames of reference, more significant reconstructions are sometimes necessary. Opportunities for transformation arise when learners encounter tension or conflict between prior learning and present experiences. Mezirow (2000) has termed this phenomenon *transformative learning* and described it as the process of "transforming a problematic frame of reference to make it more dependable in our adult life by generating opinions and interpretations that are more justified" (p. 20). This learning represents a fundamental shift in thought, feeling, and action, as well as the development of a transformed frame of reference that dramatically alters one's way of being in the world.

Much like LPP, transformative learning theory describes a holistic process encompassing a broader set of changes including how a learner feels and acts (Mezirow, 1991, 1997, 2000). Through a reflective examination of their prior assumptions, learners arrive at new ways of understanding and evaluating experience. To differentiate these transformative shifts from more commonplace changes in thinking, researchers have described them as *comprehensive* (involving a significant shift in perception about a particular element of experience), *irreversible* (highly resistant to forgetting or *unlearning*), and *troublesome* (producing discomfort or dissonance because of the degree of change involved) (Meyer & Land, 2005).

While these changes can become immediately visible in behavior, they may also be revealed in learners' concrete and committed plans to make changes in the future. But,

ultimately, transformative learning requires an intentional decision to act in new ways. These modified behavioral patterns represent the culmination of the transformative process and flow from the cognitive and affective changes that have occurred during the initial stages of transformation. In this way, transformative learning moves beyond simple modifications in thinking to a shift in identity, characterized by new ways of thinking, feeling, and acting (Meyer & Land, 2005).

Experience and education. In addition to being influenced by environmental features, learning also depends upon the nature of individual experience. Dewey (1997/1938) qualifies his assertion that learning occurs as the result of experience, acknowledging that experience can be either educative or miseducative. *Educative* experience supports learning by both building on past experience and expanding learners' opportunities for subsequent growth in the future (Dewey, 1997/1910), whereas *miseducative* experience restricts or narrows future learning (Dewey, 1997/1938). Thus, experience alone is not sufficient to facilitate learning. Rather, the quality and anatomy of a particular learning experience are what determine its potential for learning and growth.

To understand the elements of experience that facilitate growth, researchers have examined *critical incidents*, defined as everyday events which take on meaning and significance because of their ability to promote new ways of thinking (Angelides, 2001; Tripp, 1993). Similarly, experiences that feature some type of *breakdown* (Guignon, 2002), tension between past and present experiences (Clandinin, Huber, & Huber, 2006), or *expectation failure* (Schank, 2000) provide opportunities for transformation. As learners repeatedly encounter troublesome experiences, they are positioned to undergo transformations in identity as they evaluate the meaning and utility of what they have learned, and then weave these new understandings into

their lived experience (Williams, 2013; Yanchar, 2011; Yanchar, Spackman, & Faulconer, 2013). In sum, there seems to be a class of experiences associated with the transformative learning described by Mezirow (1990, 1997) and with potential for facilitating a shift in practice and identity for individual learners (Meyer & Land, 2003). The purpose of this study was to explore the PM experience and examine how it contributes to personal transformation. By identifying the critical elements of PMs' transformative experiences, and then providing rich and thick description of this process (Geertz, 1993; Stake, 2010), this article provides insight into how mentoring programs and, more specifically, PM development can be structured to facilitate more meaningful and transformative learning.

Method: A Narrative Approach

Past research has suggested that questions of learning are effectively approached by collecting and analyzing stories that reveal the unfolding of personal growth and development (Clandinin, Davies, Hogan, & Kennard, 1993; Hamilton, 2012). In what follows, we describe our group of PM participants; the sampling procedures we used to move from an initial group of 12 participants, to the 4 participants we focus on in the discussion of our findings; and our data collection, analysis, and representation methods.

Sampling and Participants

Our original sample consisted of 12 experienced PMs (9 female) who we were relatively confident had been changed by their mentoring experiences in significant ways. We used two criteria to make this distinction. First, we identified PMs who had been engaged in peer mentoring practice long enough to have potentially experienced the changes described by *transformative learning theory* (Mezirow, 1990, 1997, 2000), which we defined as two or more years. Second, based on in-depth observations of approximately 125 PMs and prolonged

engagement at the inquiry site (Williams, 2011), we identified those PMs who exemplified the skills and values the university's first-year mentoring program seeks to inculcate. These skills, among others, include interpersonal communication, leadership capabilities, successful academic habits and performance, and a deep orientation to learning. Using these two criteria (i.e., tenure as a mentor and observed growth) we selected 12 participants with whom to conduct our inquiry.

After collecting narrative data from our original 12 participants and conducting a negative case analysis to strengthen the credibility of our initial findings (Williams, 2012), we applied Patton's strategies of *intensity* and *theoretical sampling* (2002) and selected a sub-set of participants whose narratives best represented the themes we identified in our initial analysis. The objective of *theoretical sampling* is to sample specific participants or cases that manifest or represent a particular theoretical construct, while *intensity sampling* involves a search for information-rich cases that provide focused insight into a particular phenomenon (Patton, 2002). This approach to *purposeful sampling* is commonly used to select cases that illuminate the specific research questions under study (Maxwell, 2004). Using these strategies, we ultimately selected four PMs upon whom to focus in reporting our findings: Kat, Amelia, Brittney, and Robyn.

We have chosen to represent our findings by focusing on four stories from a single participant (Kat). Just as we used the strategies of *intensity* and *theoretic sampling* to identify a subset of narratives upon which to focus our final reporting, we applied a second iteration of these strategies to select four of Kat's narrative fragments to feature prominently in our discussion. These rich descriptions of a single PM's experience, in addition to supporting narratives from three other participants (Amelia, Brittney, and Robyn), invite readers to consider how transformative experience can be facilitated in other settings where undergraduate students

are provided with peer leadership opportunities. Additionally, we provide *thick description* (Geertz, 1993; Stake, 2010) of the PM experience by not only sharing PMs' narrative accounts, but by connecting these descriptions to the theoretical framework introduced in our literature review. Ultimately, these findings offer a deeper understanding of the complex phenomenon of transformative learning among undergraduate PMs, as well as potentially transferrable insights for educators who strive to provide transformative experiences for the learners with whom they work.

Each of the PMs in our study was responsible for supporting a learning community of approximately 60 first-year students. Their responsibilities included meeting individually with students two to three times per semester; attending learning community classes with their students; identifying and supporting struggling students; teaching and modeling effective academic habits; and connecting students with key campus resources (e.g., academic advisors, teaching assistants). As described above, we focus on four participants in the discussion of our findings.

Kat was 24 and worked as a PM for three years before graduating with a degree in early childhood education. As the study was being completed, Kat had just finished her first year as an elementary school teacher.

Amelia studied public health during her nearly four years as a PM. During this time she held significant training and administrative responsibilities and participated in research and program evaluation under the supervision of full-time administrators. At the time of the study, Amelia was 27 and had recently completed a master's degree in public health.

Brittney, a 23 year-old history teaching major who was a PM for three years prior to graduating and taking a job as a secondary history teacher. During the final year of Brittney's

employment, she worked as an office assistant, answering questions from first-year students and their parents, supervising the work of a large group of PMs, and providing training to newly hired PMs.

Finally, Robyn was 22 years old and studying linguistics. Just prior to the completion of the study, Robyn graduated and took a position in student affairs at a large state university in the Midwestern United States.

Collecting, Analyzing, and Representing the Narrative Data: A Hybrid Approach

Our data collection was philosophically based in narrative inquiry practice and its core assumption that narrative is a powerful way of understanding experience (Clandinin & Connelly, 2000). Specifically, we invited participants to create a timeline of the critical incidents across their mentoring experience that they believed had led to transformation (Angelides, 2001). We defined *critical incidents* as those events and situations from participants' mentoring experience that had significant consequences in terms of their personal change and development (Sikes, Measor, & Woods, 1985; Tripp, 1993). These timelines were then used as prompts in semi-structured interviews in which participants shared narrative vignettes that provided greater depth, richness, and insight into the characteristics of selected experiences from their timelines (Miles, 1990). After an initial pilot, this methodology was reviewed and modified to collect data from the remaining participants.

Our data analysis proceeded in three phases. Phase one of our analysis involved the use of qualitative data analysis techniques applied in a systematic iterative and analytical cycle (Miles & Huberman, 1994). As described in the "Sampling and Participants" section above, we initially collected and analyzed narratives from 12 PMs. We began by using their critical incident timelines and interview transcripts to develop an initial set of codes which described the

characteristics and themes that emerged across the set of critical experiences related by participants.

In phase two of our analysis, we used negative case analysis to search within the narratives from our original 12 participants for contradictory evidence for our initial themes (Williams, 2011). Through this process, we identified additional cases in our data set that led us to modify one of our original themes (see “Theme #2: Pretending to be Transformed” in the “Findings and Discussion” section below) and to discuss it in more nuanced ways. During this phase, we met multiple times as a research team to negotiate and clarify the themes we identified in our initial analysis (Miles & Huberman, 1994; Strauss & Corbin, 1990).

In phase three of our analysis, we returned to the interview transcripts of the four PMs we sampled and constructed narrative accounts of their critical experiences, with attention to preserving their personal voice (Clandinin & Connelly, 2000). To ensure that the narrative accounts we constructed accurately represented the experience of our participants, we conducted regular *member checks*, and invited participants to comment on the accuracy of our representation, as well as the interpretations we made in our narrative analysis (Lincoln & Guba, 1985; Williams, 2011). We used the strategies of interpretation, negotiation, and reinterpretation to develop a more trustworthy set of findings and to position ourselves to construct a research text that would honor the complexities of our participants’ experiences (Clandinin & Connelly, 2000; Stake, 2010).

In order to provide richer descriptions and interpretations of how PMs experience transformative growth, we have represented our data as a series of narrative accounts. We selected narratives that resonated with both the themes that we identified in our initial analysis, and the narratives shared by our original 12 participants. Because we began the study with the

overall aim of understanding, not who PMs are, but rather who they *become* during their mentoring work, the narratives we selected highlight this dynamic and ongoing process. Together, they attend to the three dimensions of the narrative inquiry space. They reveal (a) the temporal dimension to PM growth, by looking both backward and forward into PM experience; (b) the social components of their experiences that influenced their growth; and (c) a sense of the physical place where this growth occurred.

Limitations

While our sample size is small and therefore potentially not representative of all PMs' experience, the sample size is adequate for this type of narrative research. Further, our participants are part of a unique first-year mentoring program at a single institution. Consequently, due to variations in program structure, institutional culture, and individual differences, PMs' experiences on other campuses are likely to be different. Nevertheless, we selected this design because of its potential to yield rich descriptions of PM learning, deeper understanding of the elements of transformative experience, and to enhance the possibility of transferability (Lincoln & Guba, 1985) or naturalistic generalizability (Stake, 2010). Thus, we have attempted to weave together a description of PM learning that provides rich experiential understanding of a phenomenon that, despite researchers' best efforts, is still uncertain, unpredictable, and often at-odds with more orderly, linear, or positivistic methodologies (Hamilton, 2012).

Findings and Discussion

In what follows, we present a series of three narrative fragments from Kat, whose experiences we use to introduce and discuss the themes that emerged in our analysis. After each of these narrative fragments, we discuss those themes of transformation for which the fragment

provides the clearest evidence. These themes include (a) the meaningfulness of everyday experience, (b) pretending as a move towards transformation, (c) unfamiliarity and surprise as catalysts of transformation, (d) the role of reflection in transformative growth, and (e) the value of participating alongside supportive mentors (i.e., the PMs' own mentors). Following discussion of these themes, we offer a brief concluding narrative fragment from Kat that represents the transformation we observed across our group of participants.

Narrative Fragment 1: Kat's First Weeks as a Peer Mentor

Like most undergraduate students who choose to become PMs, Kat looked forward to giving back and making a difference in the lives of students. However, the everyday experience of being a PM was not what she expected. Our first narrative fragment captures a somewhat discouraged Kat, just a few weeks into her participation as a PM:

Through the office window behind my drab computer station, I could see the sun shining down brightly on the quad and students pretending to study on the grass. As I turned my gaze back inside, I looked around and noticed the other new peer mentors who had been hired with me a few weeks before. I wondered if we were all just pretending.

I remembered my interview to be a peer mentor and thinking 'Wow, this isn't just a job. This is going to take quite an investment.' I am a people person and decided to apply because I wanted to help new students. But, I had spent the first two months reading, like pretty much doing nothing but read, and it was really unbearable. Day after day, I watched people put headphones in or talk, and then pretend like they were getting something from the reading. I thought I was going to go crazy.

There were a lot of afternoons like this – watching other people pretend to be busy and thinking to myself 'this is a waste of my time.' But, then I noticed Krissy.

Everything she did, even her reading, was an investment in people. She was always asking how what she was reading could help her be a better mentor. And, she never pretended to be busy.

Even though we were all doing the same thing, reading the same stuff, I realized that day that I could really get something from it, or I could just pretend. That's when I decided I wanted to get something from this job.

Each of the themes of transformative experience is present in this first narrative. We hear Kat's surprise and frustration in discovering that being a PM was more than just heroic efforts to "help new students." We gain insight into how watching more experienced PMs led Kat to want to become a "better mentor." Kat's use of the words "wondered," "realized," and "decided" point to the role reflection played as Kat decided to take up opportunities for growth. Finally, this opening narrative illuminates the role of everyday experience in PM growth, and introduces pretending as a path to transformation.

Theme #1: The meaningfulness of everyday experience. It is noteworthy that Kat's first story of transformation is about a rather mundane afternoon. When we began our inquiry, we had an expectation that when asked to relate stories of transformation, PMs would share rather dramatic experiences. However, we found that the majority of their narratives were commonplace and grounded in everyday mentoring activities. This aligns with previous research suggesting that critical incidents tend to consist of quite straightforward and routine events that, nonetheless, become critical because of the way in which they promote reflection and meaning-making for learners (Angelides, 2001). In Kat's case, participating in required readings and completing everyday training were simultaneously commonplace and critical. Initially, she viewed this preparatory aspect of her work as unnecessary and monotonous. However, by

working alongside a more experienced PM (Krissy), she realized that reading could be “an investment in people,” and it became a legitimate aspect of her mentoring. Reflecting on the impact these same foundational readings had upon her, Amelia related a similar shift in her perspective on mentoring, commenting that “doing the readings helped change my perception of what our purpose is [and] what a mentor is.”

Participants frequently described initial frustrations with peripheral aspects of the PM role, such as assisting with daily administrative work in the departmental office where they were employed. For example, Amelia and Robyn initially dreaded the everyday work of answering office phones because it meant talking to unfamiliar students and being asked unanticipated questions. However, these activities were a prelude to the unscripted face-to-face conversations Amelia and Robyn would find themselves engaging in just a few weeks later with their mentees. Peer mentors frequently described feeling overwhelmed or frustrated with the “non-mentoring” aspects of their experience, but then described how engaging in everyday tasks like readings, answering phones, or attending weekly meetings facilitated eventual transformation. Participating in these legitimate, though peripheral, practices helped them develop familiarity with the overarching purposes of mentoring (Lave & Wenger, 1991; Wenger, 1998), laying the foundation for transformation.

In other literature, transformational growth has been linked with consistent engagement in similarly commonplace practices (Chambliss, 1989; Duckworth, Peterson, Matthews, & Kelly, 2007; Ericsson, Krampe, & Romer, 1992). Chambliss (1989) has referred to this phenomenon as the *mundanity of excellence*, finding that top performers invest significant time and effort on mundane practices in their field. Though Kat may not have enjoyed or initially seen the value in completing required readings, and answering phones was not one of the things Amelia or Robyn

imagined themselves doing as PMs, these everyday activities were prerequisite to transformation. In short, everyday activities provided opportunities to participate in the practices of mentoring in *legitimate* and *peripheral* ways (Lave & Wenger, 1991), and served as a catalyst for eventual transformation.

Theme #2: Pretending to be transformed. Another prominent theme, well-represented by Kat's first narrative fragment, is the relationship between *pretending* and *becoming*. Early in her experience, Kat observed that participating in everyday mentoring activities presented a choice either to fully engage and find meaning in the commonplace, or instead to *pretend* to be a PM who busily performs daily tasks without any sense of investment or meaning. Through her participation in everyday activities, she observed the contrast between those PMs who *pretended* to be full participants in the practice of mentoring, and those, like Krissy, who found meaning and opportunities for growth in their day-to-day mentoring experiences. Indeed, her assertion "I wanted to get something from this job" signaled her commitment to fully embrace the learning opportunities presented in the PM role.

Though Kat and the others in our study did not realize it immediately, their choices to engage in legitimate and peripheral mentoring practices positioned them for transformative growth. These activities attended to both of Dewey's criteria for educative experience (1997/1938). First, they facilitated *continuity* by providing PMs with opportunities to become familiar with foundational knowledge and skills necessary for moving toward richer, more complex mentoring experiences in the future (e.g., face-to-face interactions with the students they mentor). Second, engagement in everyday activities provided the *interaction* necessary for PMs to begin the process of transformation. Kat's fragment features educative interactions with the texts she was reading, with her peers, and with her own reflective thoughts and questions.

Rather than arguing that being a PM is a certain path to personal transformation, our opening fragment suggests that PM transformation is anything but a sure thing. Instead, transformation is a possibility when (a) PMs choose to engage as full participants in their practice, and (b) they are provided with an educative environment that supports this transformation. In our remaining narrative fragments, we use the experience of our participants to explore and uncover the elements of these transformative environments.

Narrative Fragment 2: Developing a Reflection Rubric

As Kat became familiar with day-to-day aspects of mentoring, she had opportunities to participate with more experienced colleagues in various administrative tasks. In this narrative fragment, Kat describes one such experience:

It was September 2009 and I was part of a team working on this huge research project about reflections with Trish, the director. It had only been four months since I was hired and I remember looking around at my peers and feeling a little sheepish. It was my first big meeting at work where I was being asked to contribute and everyone except me seemed to have something to say. That was really intimidating for me because I hadn't done any research or big projects before. I remember thinking to myself, 'I don't even know what reflections are.' But, when we met as a team and talked with Trish about the reflection rubric, I really loved being a part of it. I realized I knew a lot more about reflection than I thought. And, as we worked to define reflection, I recognized I had practiced and used it many times.

This was when I learned that reflection is all about the connections – connections to things we've learned, connections to emotions, and connections to experiences. Everything is connected. That's what helps me in mentoring – knowing that my

experiences as a mentor connect to the rest of my life. That's why we write reflections—so that we can connect the mentoring experiences we have to the things in our life—because we realize that mentoring will always be a part of our life, I guess. Does that make sense?

Similar to Narrative Fragment 1, Kat's experience developing a reflection rubric opens space for exploring the characteristics of transformative learning environments. Again, we see her participating with others in her mentoring community in a legitimate community practice (i.e., constructing a tool for use by other members of the community). While it does not involve directly mentoring students, it invites her to take up new ways of knowing and thinking. These new understandings transcend the boundaries of her formal mentoring practice and begin to influence her experience both within and outside the PM role.

Additionally, we hear echoes of the theme of *pretending* introduced in Kat's first narrative. Her statement "I don't even know what reflections are" and her expressions of feeling intimidated suggest she viewed herself as something of an imposter, pretending to know what she perceived others on the team already knew. However, note the subtle contrast between Kat's efforts to pretend in this instance, and the pretending she observed among her peers in Narrative Fragment 1. In the first narrative, pretending was an evasive strategy employed by PMs unwilling to take up community practices. Pretending allowed these PMs to masquerade as full participants, but ultimately were an obstacle to transformation.

In comparison, Kat's pretending was a sincere effort to act in an unfamiliar role, in order to become familiar with an unfamiliar community practice. Rather than pretending in order to avoid growth, Kat's pretending brings about a shift in her identity. In short, she pretends in order to become.

This contrast between Kat's acts of pretending and those she observed among other PMs highlights the nuance in this theme—pretending can both support or hinder transformation. Early in our analysis, we assumed that participants used pretending exclusively as a strategy to become familiar with unfamiliar or challenging aspects of their work. However, through negative case analysis we found evidence that our participants often viewed the act of pretending in more complex ways. For example, during her first semester as a PM, Brittney embraced the mantra “Fake it ‘til you make it.” But, later in her experience, she became uneasy using the word “fake” to describe her efforts to grow:

I'm not just faking these relationships and these conversations that I'm having with people. . . . It's *faith* [emphasis added] till you make it'. . . . If you keep doing the right things in your life, things will work out. I won't *fake* [emphasis added] it because I don't agree with that.

Brittney's shift from *fake* to *faith* was not an abandonment of pretending as a strategy for becoming. Rather, her new mantra (i.e., “Faith ‘till you make it”) was a more honest and growth-oriented form of pretending.

Other participants related similar narratives describing their shift from dishonest pretending, to sincere efforts to grow. For example, as a new PM Robyn was discouraged by her failed attempts to mimic more experienced PMs. But, she gained new confidence when a colleague told her, “Don't worry about how other people do it. Do it the Robyn way.” As it was for Brittney, *pretending* to be someone else was unsettling and overwhelming for Robyn. But, in her own words, she “could do it the Robyn way. [She] knew what that meant.” Robyn went on to describe how this freedom to “do it the Robyn way” empowered her to confront unfamiliar and uncomfortable challenges, but with confidence that she could rely on her own strategies for

doing so. In this and other cases, PMs did not completely abandon pretending as a strategy for growth. Rather, they learned to differentiate between inauthentic pretending, and more genuine attempts to enact unfamiliar practices. Ultimately, like skilled actors attempting to become familiar with a new role on stage, participants used pretending to familiarize themselves with the habits, practices, and skills they needed in order to become competent PMs.

Theme #3: Unfamiliarity as a catalyst for transformation. Grappling with unfamiliarity is a distinguishing feature of Kat's second narrative, and a prominent theme across all of the narratives. For example, when encouraged by a fellow PM to initiate conversations with students for the first time, Amelia's response was "No, I can't! Are you kidding me? I'm supposed to mentor students in a class that I've never even taken? I don't even know what I'm doing." Frequently, PMs described how being asked to do unfamiliar things created a space where they could, initially, make faltering and tentative attempts to enact mentoring practices. Though uncomfortable and often frustrating, these opportunities to pretend, when leveraged, were critical in participants' efforts to take up new identities as mentors. Thus, pretending and unfamiliarity seemed to be linked. Indeed, pretending typically emerged in response to experience with unfamiliarity.

Kat's description of feeling intimidated when asked to do something she "had never done before" suggests that she had slipped into a new space of unfamiliarity. Through her co-participation with more experienced members of her community, Kat gained access to a new set of legitimate, yet unfamiliar practices (Hanks, 1991). Although Kat had become comfortable with answering phones, participating in training activities, and meeting with students, her involvement in the research project became an important and helpful interruption to everydayness.

Yanchar, Spackman, and Faulconer (2013) have termed these interruptions *encounters with unfamiliarity*, and argue they are a key source of learning from experience. Though often frustrating and uncomfortable, these previously unencountered experiences introduce a productive tension between past and present experience (Clandinin, Huber, & Huber, 2006) and can produce sufficient surprise to stimulate reflection and learning (Schein, 1985; Schön, 1987, 1991, 1995). Faced with how to resolve or negotiate this tension and surprise, learners are invited into a space where they can explore new questions, search for refined ways of knowing, reflect on their practice, and *refamiliarize* themselves with the new aspects of their experience (Schön, 1995; Yanchar, Spackman, & Faulconer, 2013).

Similarly, Lave and Wenger have referred to *trajectories of participation* (1991) to describe the process by which novice learners become full participants in their communities of practice. From this perspective, learning and transformation occur as learners, initially, participate in legitimate, yet asymmetric ways when compared to more experienced members of the community. Over time, as novices' involvement in the everyday practices of the community expands, they gain access to new tasks, refined practices, and more complex skills. Thus, this trajectory—for example, the shift from simple practices like answering phones, to more complex tasks like developing an evaluative rubric—becomes the basis for progress towards full participation in the practices of the community (Lave & Wenger, 1991).

For Kat and the other PMs in our study, being invited and expected to engage in unfamiliar practices provided opportunities to be transformed. However, this required PMs to actively engage with unfamiliarity by overcoming the fear and intimidation they felt. Robyn repeatedly referred to the fear she experienced when she was expected to do unfamiliar things:

Mentoring asked me to do scary things . . . but that was no excuse for not being brave. . . . So I answered the phone in the office for the first time. I talked to my student who had gotten a 50% on a midterm. I sought out a professor who hadn't answered my emails. I spoke in front of a group of 50 people for the first time. . . . Now I know how to stare down fear in the face. Sometimes it still wins, but mostly I do.

Robyn's reference to bravery, as well as her unwillingness to make excuses, points to the conscious choice she made to enact unfamiliar practices and do the hard things expected of her. As evidenced by her assertion, "Now I know how to stare down fear in the face," this choice to face the unfamiliar aspects of her mentoring work had an educative impact and led to a significant shift in the way she approached future encounters with unfamiliarity.

Theme #4: The role of reflection. Reflection has long been recognized as a source of learning and a mode for interpreting the meaning of experience (e.g., Colvin, 2008; Dewey, 1997/1910; Entwistle, 1997; Moon, 1999; Schön, 1995; Tagg, 2003). Likewise, the degree to which PMs grew in association with unfamiliar experiences was frequently related to their willingness to engage in meaningful reflection about what the experience meant and the opportunities it presented for learning. In nearly every interview we conducted, reflection emerged as a prominent theme in the experiences related by participants and we selected Kat's critical incident narrative about developing a reflection rubric as an exemplar of this theme. It is evident in her account that participating in the rubric project was a transformative experience for Kat. In addition to its unfamiliarity and the opportunity it provided her to work alongside experienced PMs, this experience also familiarized Kat with the process of reflection and its usefulness as a tool for deepening her learning. Though brief, her concluding assertion about the value of written reflection (i.e., "That's why we write reflections—so that we can connect the

mentoring experiences we have to the things in our life”) reveals an emerging understanding of the value of reflection. Not only is it clear that she has come to appreciate that her mentoring experiences hold meaning, she also seems to understand that this meaning often remains hidden or veiled until PMs are invited to articulate it.

We found that opportunities to reflect, both formally and informally, were important in helping PMs identify, clarify, and express how their mentoring experiences facilitated their personal and transformative growth (Mezirow, 1990). Amelia described how reading about and reflecting on the value of a general education led to important changes in how she viewed her role as a mentor, the role of education, and herself as a learner:

Something that really changed me and my perception of being a mentor was doing the readings and reflections about general education. . . . I had never really read those documents and being asked to read them really changed me. . . . Along with that, there were things in my life outside of mentoring that the readings applied to—like, I needed to change my major, and that kind of stuff. So, having all of these things going on outside, and then in my mentoring work at the same time, changed me to have a better understanding of what a mentor is, why we do certain things at the university, and what an education really means.

The learning Amelia describes here extends beyond simple familiarity with or understanding of the value of a university experience. Note that in describing how this experience impacted her, Amelia frequently refers to how she was “changed,” as opposed to making simple propositional references to what she “learned.” This choice of words underscores the deep influence this experience had on her and the way in which reflecting on the unfamiliar perspectives introduced by the required readings she completed, positioned her take up a new identity as a university

student. Much like Kat described in her second narrative, Amelia used reflection to make “connections” between the concepts she was learning in her reading, and the experiences she was having both inside and outside her PM role (e.g., her decision to change her major).

The personal growth that Kat, Amelia, and others described in their narratives represents much more than knowledge acquisition or the development of new skill. Though they do not make any explicit references to transformation, their stories seem to suggest that they were experiencing the type of transformative experience described by Mezirow’s theory of transformative learning in that it was holistic, reflective, integrative, and had significant implications for their future learning and practice (1997).

As discussed earlier in the analysis of Narrative Fragment 2 (Developing a Reflection Rubric), experiences with unfamiliarity were significant triggers or catalysts of transformative growth. However, as described previously, PMs may or may not choose to engage with the fruitful unfamiliarity provided by these experiences. As asserted by Yanchar, Spackman, and Faulconer in their description of *learning as embodied familiarization* (2013), unfamiliarity can only facilitate meaningful learning when learners act as agents and engage in the “effortful inquiry” (p. 10) necessary to experience *refamiliarization* and take up new identities. For the PMs in our study, reflection was an important aspect of these efforts and was critical in facilitating the learning that shaped participants in both their mentoring work and their broader experiences.

Narrative Fragment 3: Becoming a Leader

Over the course of her first year as a PM, Kat became increasingly familiar with the everyday practices that came with being a PM and eventually shifted from being a self-conscious and uninformed novice, to a seasoned leader. Because of her growing understanding of the

practice of mentoring, as well as the respect she had earned among the other PMs, she was selected to become a *coordinating peer mentor*. In this new role she had responsibility for providing support, guidance, and ongoing training to a group of approximately 15 PMs. In her third narrative fragment, Kat describes the impact of this experience upon her development:

I remember when I was asked to be a coordinator in the summer of 2010. I wanted to do a really good job because I knew it was a different responsibility. I was excited about being a leader, but I also felt really inadequate with some of the other mentors because I didn't think that I knew anything more than they did.

At first, I just kind of thought 'This isn't mentoring, this is managing.' And then I realized how much my job was about being a mentor to the other peer mentors. My supervisor, Breck, really helped me see that.

I loved working with Breck. He left a lot of things up to me. We would meet once a week in his office and he would constantly ask me 'What do you think would happen if you did that?' I loved that—I hated it, but I loved it at the same time because it helped me so much in my teaching and my career because you don't always have someone to tell you what to do. It's really nice to have someone that trusts you and who gives you feedback, but lets you try things. I liked that a lot and I felt really inspired. I think that was a great beginning, a beginning of everything for me.

As with Kat's first two narrative fragments, her experience in becoming a leader and being asked to mentor other PMs elucidates a number of the themes discussed previously. Though she was still acting as a PM, she also occupied a new position, one that involved her in mentoring other PMs and that moved her toward more intensive participation in the day-to-day practices of her mentoring community. As before, we hear Kat articulate the emotional tension

she felt in the midst of this new experience with unfamiliarity. Though she was “excited about being a leader,” she experienced feelings of inadequacy and wondered whether she was really prepared for this “different responsibility.” Her thought “This isn’t mentoring. This is managing” leaves us to wonder about the role that *pretending* may have played as she shifted away from her original stance as a *mentor*, made a short-lived attempt to *pretend* to be a *manager*, and then took back up her identity as a *mentor*.

Finally, in this narrative fragment Kat, again, relates how engaging in reflection on her practice led to shifts in her ways of knowing and acting. However, in this case, her reflection came about through her interactions with Breck, who not only acted as Kat’s supervisor, but as a mentor who could provide both challenge and support (Sanford, 1967) to Kat as she continued to develop.

Theme #5: Participating alongside supportive mentors. The fifth and final theme of *mentor support* was present across the entire collection of narrative accounts we gathered from participants. As Kat described above, the opportunity to lead and support other PMs provided an important opportunity for transformation. However, her narrative makes it clear that the unfamiliarity of her new role as a “coordinator” was not the only element of her experience that facilitated her learning. In this case, Kat relied upon the support of her own mentor in navigating the unfamiliarity she encountered as she mentored other PMs. Through her weekly dialogues with Breck, Kat was invited to take up a reflective stance from which she could evaluate her mentoring practice, consider the potential impact of her actions, and develop confidence in her abilities to make decisions about how to support the PMs for whom she had responsibility. More importantly, Breck’s mentoring was instrumental in helping Kat understand that in her new role she was still a mentor, just “a mentor to the other peer mentors.” Ultimately, the support Kat

received from Breck allowed her to see how she could respectfully *mentor* the other PMs for whom she was responsible and leave her attempts to *manage* behind.

Though we selected Narrative Fragment 3 (Becoming a Leader) as an exemplar of the theme of *mentor support*, the influence of mentor support is also present in Kat's first two narrative fragments. In Narrative Fragment 1 (Kat's First Weeks as a Peer Mentor), Kat was the recipient of more subtle and indirect mentoring. It is clear that observing a more seasoned PM (Krissy) precipitated Kat's decisions to fully invest in becoming a PM and to allow herself to be changed by her experiences. In Narrative Fragment 2 (Developing a Reflection Rubric), Kat described how she and other PMs "met as a team and talked with Trish about the reflection rubric," and how those experiences introduced her to the transformative concept of reflection.

Mentor support was also an important part of the growth for the other participants in our study. For example, Amelia felt overwhelmed when, during her first semester as a PM, an international student came to her in need of help. The student was struggling significantly and Amelia was at a loss for how to provide support. Despite her best efforts, the student continued to underperform, so Amelia sought guidance from her supervisor and mentor, Sherry. This is what Amelia had to say about the impact of that interaction: "I was feeling really overwhelmed. I felt like I was failing in a lot of ways. But, as we talked I had a much better understanding that I'm not here to fix all of their problems." This nuanced understanding of her role as a PM was critical in Amelia's development because it liberated her from the burden of feeling personally responsible each time one of her students failed. Amelia went on to describe how influential Sherry was in helping her come to this realization: "A lot of that came from talking things through with Sherry. . . . The next semester, I wasn't concerned about failing. I was like 'Here is a new experience. What can I take from this? What can I learn?'" Through her educative

interactions with Sherry, Amelia not only redefined her role as a PM, but she began to embrace what Carol Dweck has termed a *growth mindset* (2006) and came to see unfamiliarity and challenge as opportunities for learning.

Participants in our study frequently related how being mentored by others positioned them to take up a new orientation toward learning. Robyn described it this way: “Brent was my mentor. He told me ‘Every day is awkward.’ When I accepted that, things didn’t seem as scary.” For Robyn and the other PMs in our study, having access to a caring and skilled mentor, whether that was another PM or a staff supervisor, was critical. These mentors provided them with the support they needed in order to face the challenges they encountered in their mentoring experience, do unfamiliar things, and then reflect on what they were learning and how they were being transformed by these experiences. Indeed, across the narratives we collected, it was evident that being mentored by others helped to integrate and augment other educative aspects of PMs’ experience. Specifically, their mentors helped them to leverage the transformative potential of the unfamiliar experiences they encountered and the subsequent opportunities for reflection and growth that flowed from these experiences.

Narrative Fragment 4: An Unexpected Return to Mentoring

In December of 2011, after having completed her student teaching experience, Kat returned to her small hometown in the Midwest to spend the winter break with her family. During this time, she found herself drawn, somewhat unknowingly, back into the practices she had become familiar with as a mentor:

I found myself helping people in my hometown who I knew were going to be freshmen. I just did the same [mentoring] job, but outside of the job. It was kind of fun because I realized ‘This is what I used to do. And, I really like it.’

This brief concluding narrative fragment provides insight into the degree to which Kat was transformed by her experiences as a PM. Though it had been nearly five months since she had finished her tenure as a PM, upon finding herself in the midst of others who she “knew were going to be freshmen,” she tacitly recognized it as familiar. Because mentoring habits and practices had become a natural part of the way in which she interacted with others, her response was smooth, skilled, and natural. In contrast to the experiences she described in her first three narratives, she was no longer playing a role, pretending, or even making deliberate attempts to act as a mentor. Rather, her description of this experience suggests that engagement in the practices of mentoring had become familiar, authentic, and tacit for Kat—so much so that she did not realize until later that she had been doing “the same job, but outside of the job.” In short, mentoring had become an integral and internalized aspect of the way in which Kat engaged with and participated in the world.

We observed this same emerging familiarity across our other participants. As they repeatedly encountered unfamiliarity, persisted in exploring these unfamiliar aspects of their practice, and then worked to refamiliarize themselves in these situations, they seemed to experience what has been referred to as *tacitization*. This tacit familiarity typically emerges through sustained engagement with unfamiliar activities, and leads to increasingly intentional and skilled ways of knowing, doing, and being (Yanchar, Spackman, & Faulconer, 2013). More importantly, as represented in Kat’s final narrative fragment, this learning is characterized by an eventual ability to engage in previously unfamiliar practices without effort or deliberation.

As PMs’ learning became tacit, it extended beyond the boundaries of their mentoring role and began to permeate other aspects of their lives. Kat’s final narrative fragment and her realization that she was “doing the same job, but outside the job” is an exemplar of this

phenomenon. In performing negative case analyses to strengthen our confidence in this finding, we identified other instances in which Kat had alluded to the way in which her learning as a PM had flowed forward into her future experiences. For example, in Narrative Fragment 3 (Becoming a Leader), she related how the lessons she had learned from Breck, later became valuable in her work as a teacher. In fact, she described her interactions with Breck as a “great beginning, a beginning of everything.” Similarly, in Narrative Fragment 2 (Developing a Reflection Rubric) she reflected on the connections between peer mentoring and the “rest of [her] life,” concluding that “mentoring will always be a part of our life.”

The habits, attitudes, and practices of mentoring also extended into the lives of our other participants. Robyn described how becoming a more skilled and caring listener—a skill that a number of participants identified as critical for success as a PM—flowed into a variety of the relationships she had outside her work as a PM: “Everything with people became easier. Blind dates? No sweat. It’s like meeting a student for the first time. Little shy me made more friends than I could imagine – at work, at school, at church.” For Robyn, listening had become a natural part of how she built relationships across all the domains of her life. In Amelia’s case, familiar mentoring practices flowed into her experience teaching in Holland as a missionary. Similarly, Brittney described how her identity as a mentor became intertwined with her life as a middle-school history teacher.

Across our participants, we observed underlying themes of becoming, tacitization, and transformation in the narratives they shared about their learning in the PM role. Indeed, being a PM seemed to be a highly educative experience. As they engaged in the everyday practices of mentoring, confronted unfamiliarity, reflected on their experiences, and lived alongside supportive mentors, our participants did not merely become competent in thinking, speaking, and

acting as PMs. Rather, their engagement with and involvement in the world at large was transformed as they gave up mentoring as a formal role to be played and, subsequently, took up mentoring as an important aspect of their identity.

Summary: Characteristics of Transformative Peer Mentor Experience

The narrative that opens this article focuses on a moment of tension from one of the authors' experience, in which he found himself looking inward, questioning his own journey as a PM, and then wondering whether his was truly a worthy narrative of becoming. The re-telling of this story of the orange-handled scissors raised questions about being, becoming, and transformation in the PM role. These questions opened a new inquiry space in which to, first examine the narratives of PMs who we believed had been transformed by their mentoring experiences, and to then connect these narratives to the broader research narrative of PM learning.

In selecting narratives to share from the lives of our participants, we were drawn to their accounts of experiencing tension on the boundaries of everydayness and unfamiliarity, and being and becoming. Our analysis of these critical experience narratives provides understanding of the characteristics of learning environments that are associated with transformative learning for PMs. First, transformation can begin early in PMs' experience as they participate in highly structured activities and clearly defined aspects of the mentoring role. Engagement in these everyday and sometimes mundane activities—be it formal training programs, administrative or support work in an office, or structured group meetings—familiarizes PMs with the knowledge, practices, and skills that are fundamental to being a PM. As a result, student leaders are provided with concrete opportunities to take up this new mentoring identity.

Second, PMs' initial attempts to become familiar with new aspects of their role often lead them to engage in acts of pretending. For some, pretending may be a strategy used to merely appear to be playing the PM role. For those PMs who are transformed by their experiences, however, their efforts to pretend are a more truthful attempt to learn about and become familiar with what it means to be a PM.

Third, experiences with unfamiliarity are catalysts for significant learning among PMs, particularly in cases where they are invited to engage in a challenging task or assignment. This third theme of unfamiliarity supports findings from a previous study suggesting that acting as a PM moves undergraduate students away from their more familiar and traditional *student* role, and invites them to grow into an unfamiliar role as a student leader. In this somewhat hybrid role, PMs are expected to serve as peer leaders, but they begin to act and think in ways more like what might be expected from faculty members or other institutional leaders (Bunting et al., 2012). This shift toward a role requiring more sophisticated ways of approaching the college experience seems to contribute to a particularly effective learning experience.

Fourth, unfamiliarity is more likely to lead to learning when PMs engage in meaningful reflection on their experience. This reflection on mentoring practice provides space to explore new ways of thinking, raises productive questions about the meaning of experience, and can help PMs articulate the new learning that arises through and from unfamiliarity.

Fifth, PMs seem to be most effective in capitalizing on the growth-promoting aspects of their environment when they receive both challenge and support from their own mentors. Whether they are more experienced PMs or staff supervisors, these "mentors to the mentors" appear to play an important role in PMs' transformation. And, having access to their own mentor seems to augment the impact of the four elements of experience mentioned above.

Conclusions and Implications

This study makes several important contributions. First, it responds to a call for research exploring the particular aspects of the PM experience that contribute to positive outcomes (Kenedy & Skipper, 2012), and extends understanding of how PMs experience transformative growth in their role. Second, it contributes much needed methodological diversity to the research discourse on PM learning by employing tools of narrative inquiry to analyze and represent PM experience in ways that provide understanding of both how and what PMs learn. Third, it extends the findings of previous studies indicating that being a PM leads to holistic learning (e.g., Bunting et al., 2012; Harmon, 2006) by contributing new understanding of the particular aspects of the PM experience that are associated with transformative growth. Finally, it provides insight for institutional leaders in how to structure peer mentoring programs and mentoring environments in ways that facilitate PM transformation.

Rather than providing a formulaic strategy for how to *cause* transformation among PMs, our findings paint a complex and nuanced picture of PM growth, one in which environmental and interpersonal elements of experience play equally important roles in influencing learning. One theme not mentioned explicitly in our Findings and Discussion, but to which we have alluded numerous times throughout the article, is the need for PMs to fully engage in the learning process. Whether it was a willingness to embrace the sometimes mundane, yet essential everydayness mentoring practice; a conscious choice to *pretend* in productive and growth-promoting ways; openness to new and unfamiliar experiences; or being receptive to opportunities to reflect and be mentored; transformation was dependent, in part, upon the degree to which PMs responded to and interacted with their learning environment in productive ways. For each PM in our study, it seemed that transformation became possible once they had, like Kat, decided that

they “wanted to get something from this job” and then made good on that desire by fully engaging in the learning opportunities afforded them.

Thus, transformative learning, as we have defined it through integrating the literatures reviewed previously (i.e., as a shift in identity, signaled by integrated changes in thinking, feeling, and acting), is not a mechanistic process that invariably results when PMs are subjected to particular inputs or training interventions. Rather, the potential for transformation among PMs seems to exist when PMs are meaningfully engaged in activities and environments that offer opportunities to be transformed. This meaningful engagement can happen both tacitly, through learners’ participation in routine or everyday tasks; or more deliberately, as they engage in reflection and problem-solving (Yanchar, 2011). Regardless, our findings point to the need for PMs who embody Dweck’s notion of a *growth mindset* (2006). Peer mentors who embrace unfamiliarity, seek out learning opportunities, and believe that ability improves through reflection on practice, seem well-positioned for transformation. Consequently, PM recruitment and selection practices might be re-examined to evaluate the degree to which they help institutions and programs identify the PM candidates who are most likely to embrace the transformative potential of being a PM.

Despite the fact that learning outcomes for PMs are highly dependent upon individual choices, our work suggests that the door for personal transformation is opened when mentoring environments include a number of key elements. Specifically, transformation appears to be more likely when PMs are engaged in meaningful everyday practices that support them in taking up new identities; are invited to take up new ways of being by *pretending* in unfamiliar roles; fully engage in the challenging aspects of their practice; regularly reflect on their experiences; and have access to supportive faculty and staff mentors.

These findings have several implications for those who administer peer mentoring programs on college campuses. First, because of the transformative potential of the PM role, institutions should consider how mentoring programs can benefit both mentees and mentors. While the primary purpose of these programs is to offer support to a target mentee population (e.g., first-year students, underrepresented populations, pre-service teachers), institutions should also consider the obligation they have to provide a mentoring experience that contributes to the development of the PMs. Further, when mentoring programs make PM learning a high priority, outcomes for mentees are also likely to improve because of the increased competence and maturity of the mentors with whom they interact.

Additionally, this study has implications for understanding how program administrators can approach the process of preparing and developing peer leaders. While the vast majority of peer leadership programs provide some type of formalized training for student leaders (Keup, 2010), this training tends to be both front-loaded and brief. To be clear, initial preparation for PMs is well-advised and helps prepare PMs to successfully perform in their roles. However, it is also imperative that administrators attend to the need for ongoing development and continued support of PMs once they enter their practice (Esplin, et al., 2012; Jacobs, Hurley, & Unite, 2008).

Additionally, rather than merely providing formal learning *activities* intended to “train” PMs, administrators should work to create transformative learning *environments*. Thoughtfully designed learning environments can then provide an educative context for the informal learning opportunities that, across time, are more likely to contribute to personal transformation among PMs (Parrish, 2005, 2009; Yanchar, 2011). While the specific features of these environments should be responsive to the unique needs and constraints of each particular mentoring program,

we argue that PMs are more likely to experience transformative growth in environments that include the elements described by the five themes of transformation we have introduced here (i.e., everyday practice, growth-focused pretending, unfamiliarity, reflection, and mentor support).

Future research could be conducted with larger samples of PMs and across a variety of institutional types to strengthen readers' willingness to trust the present findings. Additionally, work should be done to examine the experience of students in other types of peer leadership roles on college campuses (e.g., hall advisors, teaching assistants, orientation leaders) to deepen understanding of the characteristics of co-curricular experiences that support transformational learning.

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doi:10.1037/a0031012

**Article #3: Transformative Mentoring: Examining the Experience of
Undergraduate Peer Mentors**

Transformative Mentoring: Examining the Experience of Undergraduate Peer Mentors

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Abstract

This review integrates two bodies of research—(a) transformative learning and (b) peer mentor development—to provide understanding of how the mentoring experience can promote transformative learning for undergraduate peer mentors. Peer mentor (PM) programs have proliferated on college campuses worldwide as institutional leaders have come to understand the value of student-to-student interactions and their positive impact upon student development and academic success. While the primary focus of these relationships is on the protégé, PMs themselves are also well-positioned for transformative learning through their mentoring experiences. Nevertheless, very little is understood about this developmental process and how particular aspects of the PM experience contribute to transformative growth. Findings from a review of 83 studies suggested that PM transformation is more likely when institutions work to create transformative learning environments that include (a) trigger events; (b) opportunities for reflection; (c) collaborative discourse; and (d) supportive learning communities. Recommendations are made for how practitioners can incorporate these elements into PM experience.

Keywords: peer mentor, peer leader, transformative learning, trigger events, reflection

Transformative Mentoring: Examining the Experience of Undergraduate Peer Mentors

Although *peer leader* is a general term encompassing a range of student leadership roles, peer mentors (PMs) are a particular type of peer leader who establish personal relationships with protégés and provide formalized academic, emotional, and social support (Cuseo, 2010). While the focus of these relationships is on the protégé, PMs themselves are also well-positioned to experience growth. Indeed, through their mentoring, PMs strengthen their interpersonal and facilitation skills (Russel & Skinkle, 1990; Shook & Keup, 2012), deepen their knowledge of campus resources, come to value diversity, and refine their academic skills (e.g., time management, critical thinking) (Landrum & Nelsen, 2002). Additionally, there is some evidence that PMs also experience more holistic and transformative growth (Bunting, Dye, Pinnegar, & Robinson, 2012; Harmon, 2006). Nevertheless, very little is understood about this developmental process and how particular aspects of the PM experience contribute to transformation.

Though the literature regarding the PM transformation process is nascent, transformative learning as a general phenomenon has been well addressed in research on adult learning. Transformative learning theory (Mezirow, 1990) describes learning experiences that facilitate personal transformation by bringing about a fundamental change in perspective. Mezirow (1997) has characterized this learning as a new capacity for autonomous thinking, as well as a modified *frame of reference* that is “more inclusive, discriminating, self-reflective, and integrative of experience” (p. 5). Transformative learning occurs through experiences that challenge learners’ assumptions, promote reflection, and, ultimately, lead to a permanent shift in a learner’s identity and way of being, such that they come to think, feel, and act in new ways.

While the literature on PM learning does not directly address the transformative aspects of PM experience, there are indications that being a PM leads to the growth described by transformative learning theory. Consequently, the purpose of this review will be to, first, examine the research literature pertaining to (a) transformative learning and (b) positive outcomes among PMs in higher education. Second, findings from these reviews will be synthesized to explore how transformative learning theory can inform the design of high-impact PM learning experiences. More specifically, by describing the characteristics of transformative learning and then linking these elements to the process of PM development, this review will provide a new conceptualization of how the PM experience can be shaped to promote transformative learning. The review is organized around an underlying review question: How can the PM experience be structured to provide for frequent and transformative learning opportunities?

Theoretical and Conceptual Framework

Peer Mentors in Higher Education

Peer mentor roles. Titles given to student leaders in higher education vary (e.g., peer leaders, peer advisors, peer tutors, peer educators, peer mentors); however, they share a common set of functions. Colvin and Ashman (2010) identified five specific roles played by PMs who were assigned to mentor students in a first-year student success course. Analysis of data from PMs, instructors, and students suggested that PMs are viewed as (a) connecting links between students and critical university resources; (b) models of effective student behavior; (c) learning coaches who support students in developing effective academic skills; (d) advocates for students' needs and concerns; and (e) trusted friends, offering social and emotional support. Although the study was focused on a single PM program serving a narrow segment of the student population,

its findings align with similar studies exploring the boundaries of the PM role (e.g., Kenedy & Skipper, 2012; Holt & Berwise, 2012).

The benefits to peer mentors. Although the primary purpose of PM-based programs is to promote positive outcomes among mentees, there are mutual benefits for those who serve as mentors, including positive social, academic, and affective outcomes (e.g., Ender & Newton, 2010; Harmon, 2006; Shook & Keup, 2012). Because of the relationship-based nature of their work, PMs often grow along social dimensions. For example, new student orientation leaders have reported increases in their interpersonal communication and group facilitation skills, as well as their ability to work under pressure (Russel & Skinkle, 1990). Further, in one of the most recent and comprehensive examinations of the benefits associated with peer leadership opportunities, a national sample of student leaders was surveyed to identify how being a peer leader impacted them. Common benefits included increased knowledge of campus resources, improved relationships with faculty members, and appreciation for diversity (Keup, 2010). However, one limitation of these studies is that they relied primarily upon self-reported data from PMs. Nonetheless, these findings have been supported elsewhere in research that relied upon more objective measures of mentor growth (e.g., Astin, 1993).

Serving as a peer leader is also associated with improved academic ability. For example, results from a nationwide survey of faculty members teaching introductory psychology courses suggested that peer leaders who provided research support in the classroom were better prepared to succeed in graduate studies due to increased skill in data analysis, development of quantitative instruments, and technical writing (Landrum & Nelsen, 2002). Similarly, undergraduate PMs have reported stronger time management, critical thinking, problem-solving, and general study skills (Shook & Keup, 2012). However, there is some evidence that peer leadership experiences

can occasionally have an adverse academic effect. In the National Survey of Peer Leadership reported on by Keup (2010), analysis of qualitative data suggested that overinvolved or underprepared PMs experienced drops in academic performance due, largely, to devoting excessive time to mentoring responsibilities. Likewise, PMs who participated in Colvin and Ashman's study (2010) reported challenges in balancing mentoring responsibilities with other time commitments. Thus, being a PM does not have a direct relationship with positive academic outcomes. Rather, providing PMs with appropriate preparation and support seems to improve their experience and minimize negative outcomes.

Finally, a smaller number of studies have pointed to affective gains associated with being a PM. Most commonly, PMs reported feeling an increased sense of belonging on their campus, a stronger sense of institutional connection, and satisfaction with the friendships they developed with mentees (Colvin & Ashman, 2010; Hughes, Boyd, & Dykstra, 2010; Kenedy, Monty, & Lambert-drache, 2012; Shook & Keup, 2012). Additionally, because of the difficulty PMs often encounter in forming relationships with students, PMs have reported increased resilience and persistence when confronting challenges. For example, in a study of preservice teachers providing academic support to at-risk peers, mentors' written reflections revealed that they increased their self-efficacy through experiences with unmotivated students (Garza & Ovando, 2012). One noticeable shortcoming in this collection of studies is that they were conducted with volunteer PMs who were likely to have come into the mentoring role with a unique set of motives and expectations. It is unclear how the experience of these PMs might differ from those who are paid an hourly wage, awarded a scholarship, or provided with academic course credit in exchange for serving as a PM.

In sum, the body of literature on the PM experience suggests that PMs develop across a diverse set of domains. As PMs support their peers in developing effective academic skills, educate them about campus resources, and invest time and effort in their success, PMs grow in parallel ways as they live alongside those they mentor. However, PM learning is not restricted to isolated knowledge domains, skill sets, or attitudes. Additional research has suggested that PMs occasionally experience a degree of learning that extends beyond and across these boundaries. Again, the purpose of this review is to further explore the research on PM learning to better identify what leads to more holistic and transformative learning for those who serve as PMs.

Transformative Learning

Experience supports learning when it attends to *continuity* by both building on past experience and expanding learners' opportunities for future growth (Dewey 1997/1938). Through repeated experience, learners develop a set of assumptions that they carry forward into future experience. These assumptions and expectations make up *frames of reference*—integrated sets of values, beliefs, attitudes, and feelings—that become tools for filtering, interpreting, and making sense of our lived experience (Mezirow, 1997).

Learning can be characterized by this ongoing process of modifying and refining one's frames of reference. Driving this process is the learner's attempt to achieve coherence between the assumptions she has brought forward from prior learning experience, and her observations and experience in her present circumstances. Through this interplay of past and present experience, she forms increasingly dependable assumptions that then guide subsequent learning experience.

While experience may confirm previously held assumptions, or require only slight modifications of our pre-existing frames of reference, more significant reconstructions are

sometimes necessary. Opportunities for transformation arise when learners encounter tension between prior learning and present experiences. Mezirow (2000) has explored this process of “transforming a problematic frame of reference to make it more dependable in our adult life by generating opinions and interpretations that are more justified” (p. 20) and termed it *transformative learning*. Ultimately, this learning is characterized as a fundamental shift in thought, feelings, and actions that substantially alters one’s way of being in the world.

In contrast to traditional perspectives on learning that focus on isolated processes of knowledge acquisition, skill development, or attitudinal changes, transformative learning theory describes a holistic process that extends across learning domains. Because transformative learning, at its core, involves reconstruction of one’s perspective, it leads to a much broader set of changes including how a learner feels and acts (Meyer & Land, 2005; Mezirow, 1991, 1997, 2000). The psychological dimension of transformative learning forms the foundation of these changes since it involves an examination of one’s prior assumptions and beliefs about self. Through this reflective process, learners adopt new ways of understanding, interpreting, and evaluating experience. In attempting to differentiate the psychological changes that characterize transformative learning from more commonplace changes in thinking, researchers have suggested that these changes are *comprehensive* (involving a significant shift in perception about a particular element of experience), *irreversible* (highly resistant to forgetting), and *troublesome* (initially producing discomfort or dissonance because of the degree of change involved) (Meyer & Land, 2005).

Ultimately, transformative learning requires a commitment to act in new ways. Often, these changes become immediately visible in behavior; however, they may also be revealed in learners’ concrete plans to make changes in the future. These modified behavioral patterns have

an integrative effect in that they represent the culmination of the transformative process and flow from the cognitive and affective changes that have occurred during the initial stages of transformation. In this way, transformative learning moves beyond simple modifications in thinking to a shift in identity (Meyer & Land, 2005).

Method

This study synthesized findings from searches across two bodies of research. In the first search, inclusion criteria were (a) peer-reviewed articles that (b) reported on transformative learning outcomes, (c) among undergraduate college students. The second aspect of the search examined articles on the impact of PM programs upon the mentors themselves. For this search, inclusion criteria were (a) peer-reviewed studies that examined (b) undergraduate peer-to-peer relationships whose (c) purpose was to provide personal support and guidance (Cuseo, 2010).

To locate articles for the first search focused on transformative learning, a search of the ERIC, Educational Full-Text, and PsychNet databases was conducted using the following search terms: transformative learning AND higher education, transformative learning AND post-secondary education, transformative learning AND colleges, and transformative learning AND universities. This initial search returned 143 results, of which 29 met the inclusion criteria (i.e., peer-reviewed articles reporting on transformative learning among undergraduate students). Next, a search of articles and book chapters written by Mezirow was conducted, resulting in identification of seven additional articles and chapters for inclusion. Thus, 36 articles and chapters were reviewed within this domain.

As described in the introduction, PMs are a specialized type of peer leader. However, higher education researchers have failed to arrive at a unifying definition of mentoring (Dawson, 2014). Consequently, a wide variety of terms have been used to describe the types of

individualized peer-to-peer relationships that were at the center of this inquiry. Thus, to find articles for the second search focused on the impact of mentoring on peer mentors in higher education, a relatively inclusive set of keywords was used: (peer mentoring OR peer counseling OR peer relationship OR peer teaching OR peer tutoring OR tutoring) AND (outcomes OR educational benefits OR student development) AND (higher education OR postsecondary education OR colleges OR universities). The initial search yielded 181 articles, of which 28 met the inclusion criteria (i.e., peer-reviewed articles reporting on learning outcomes for undergraduate PMs) and aligned with the definition of peer mentoring outlined in the introduction (i.e., individualized peer relationships focused on holistic development). This was deemed too narrow a scope for conducting a comprehensive literature review. Consequently, a follow-up search of prominent journals (e.g., *The Journal of the First-Year Experience and Students in Transition*, *Journal of College Student Development*, *Review of Higher Education*, and *Mentoring & Tutoring*) was conducted to identify additional articles reporting on outcomes for those who serve as PMs. This search yielded 19 additional articles, which made a total of 47 articles on PM learning that were included in the final review. Thus, the overall literature review included a total of 83 articles, 36 focused on transformative learning and 47 focused on undergraduate PM learning.

The final collection of articles was coded and analyzed using the following procedure: First, articles were assessed for explicit descriptions of the types of experience that were associated with transformative learning outcomes among undergraduate PMs. Second, synonymous and like terms were grouped (e.g., “trigger events” and “unexpected challenges”) to create loose categories of similar types of PM experience. Finally, these newly grouped

characteristics of PM experience were then further categorized into an integrated framework that provides practical insights for facilitating transformative learning experiences among PMs.

Findings and Discussion

In the sections that follow, first, the literature on PM learning is reviewed, with particular emphasis on research that explores holistic mentor development. Next, the literature on transformative learning theory is reviewed to define the characteristics and process associated with this type of growth. Finally, these two literatures are integrated to discuss how transformative learning theory can inform the design of high quality PM learning environments.

Holistic and Transformative Development among Peer Mentors

While descriptions of learning often reduce it to simple knowledge acquisition or development of narrow skill sets, it can also be defined as a process of becoming, in which individual learners form new identities and larger communities of learners renew and recreate themselves (Krippendorf, 2006; Lave & Wenger, 1991). In addition to studies measuring gains in narrow areas of development (e.g., time management, study skills, feelings of belonging) there is evidence that PMs do experience more transformative learning. These studies have largely been qualitative in nature and have examined the phenomenon of PM development from the perspective of the PMs themselves. For example, in a study of PMs in a first-year learning community, participants internalized lessons learned through mentoring and then applied them to their overall personal development (Harmon, 2006). Semi-structured interviews were conducted with seven PMs (6 female) at a four-year, public regional university in the southern United States. In these interviews, participants described what they had learned from their mentoring experiences and how this learning had impacted their personal and professional identities.

One of the most prominent themes that emerged through analysis of interview transcripts was PMs' increased sense of responsibility toward their education, as well as a commitment to supporting the growth of others in their learning community. These changes signaled a shift in identity as PMs transitioned from inexperienced students to responsible adults. Similarly, PMs described how their mentoring experiences influenced their behavior and thinking outside the mentoring role. Specifically, participants in Harmon's study developed what might be considered *mentoring personas*, or new ways of being that became visible in their academic work, career pursuits, and personal relationships.

Similarly, in a narrative study of PMs at a large, private, faith-based university, findings suggested that mentoring first-semester college students led PMs to take up a deeper orientation to learning (Bunting, et al., 2012). In the study, 18 undergraduate PMs composed narrative field texts (observational and reflective notes capturing their personal experience) and then worked collaboratively to interpret the meaning of their stories by composing interim research texts (documents that draw on field texts to interpret meaning and significance). An inductive-deductive and iterative process of textual analysis revealed that PMs developed more intentional academic practices, as well as new perspectives toward learning. Peer mentors' stories revealed a shift from an initially superficial focus on course requirements and the reproduction of unrelated fragments of knowledge, to an eventual deep approach to learning that included self-reflection and the integration of knowledge.

Across the studies reviewed, the most common limitation was the reliance on homogenous samples of PMs at single institutions. Thus, there are questions about whether findings are generalizable to PMs in differently structured mentoring programs. Additionally,

because samples were typically made up of Caucasian women, it is unclear whether study findings adequately represent the experience of both minority and male PMs.

To summarize, some studies have suggested that PM learning can extend beyond the acquisition of particular academic skills or interpersonal abilities, to integrated and applied learning that is more holistic and durable. However, the higher education experience is ultimately about fostering essential learning outcomes that, beyond improving time management skills or increasing familiarity with campus resources, shape a student's view of the world and subsequent action in it (AAC&U, 2011). Consequently, by understanding the types of PM experience that can lead to transformative growth, those who administer PM programs can more effectively align their efforts with the broader purposes of the undergraduate experience and structure the PL experience as a high-impact practice (Kuh, 2008). While the previously reviewed studies have provided some understanding of the transformative potential of being a PM, they have largely focused on describing what PMs learn from their experiences. Although they give some implicit insight into the factors that facilitate growth among PMs, they have not adequately explored the transformative elements of the PM experience.

An Integrated Model of Transformation

Mezirow's original description of transformative learning (1978) was based upon a 10-phase model that emerged from research examining the experience of 83 adult women re-entering college at 12 institutions. In this ethnographic study, Mezirow used grounded theory to analyze observational field texts, and then reported his findings in a narrative format. Based on this analysis, he developed a model for personal transformation made up of the phases below:

- Experiencing a disorienting dilemma
- Undergoing self-examination

- Engaging in critical reflection
- Relating one's experience to others' experiences
- Exploring options for new ways of acting
- Building competence and confidence in new roles
- Planning a course of action
- Acquiring knowledge and skills for implementing one's plans
- Testing of plans
- Integration of new perspectives with prior assumptions

Following Mezirow's initial research, additional descriptions of transformative learning were developed that integrated one or more of Mezirow's original phases. For example, Brookfield provided a five-phase model of transformation that included (a) trigger events; (b) appraisal; (c) exploration; (d) developing alternative perspectives; and (e) integration (1987). In contrast to Mezirow's assertion that transformation is exclusively initiated by negative events, Brookfield's model also made allowance for transformations stimulated by positive events. Similarly, in a study investigating how graduate students become self-directed learners (Taylor, 1987), transformation was described using four phases (i.e., disconfirmation, exploration, reorientation, equilibrium). Finally, Keane (1987) identified four phases in the transformation of religious commitment: (a) disorientation; (b) search for meaning; (c) self-acceptance; and (d) integration.

Although the number of phases and the labels assigned to them varies across models, they seem to describe a common developmental path toward transformative learning. First, in every model reviewed for this study, the transformative process begins with an experience that introduces uncertainty or disorientation for the learner. Second, this uncertainty leads the learner

to a reflective search for new meaning as they question prior assumptions, compare their own experiences to those of others, and engage in dialogue with others in their learning environment. Third, learners begin to explore new ways of thinking and acting, eventually making more concrete plans to evaluate any new ideas or practices they have adopted based on their reflections and explorations. Finally, after a period of testing and experimentation with these new perspectives and behaviors, learners adopt and internalize those perspectives and related actions that seem valid based on past and present experience.

I have integrated these four common components of the various models reviewed and identified four phases that have practical relevance for the process of transformative learning among PMs: (a) encountering trigger events, (b) self-examination and reflection, (c) exploration and revision of assumptions, and (d) integration and internalization of new understanding and practice.

By offering this modified framework for exploring transformative learning among PMs, it is not suggested that PM transformation invariably follows this pattern, but that these four phases account for most experiences. Indeed, the learning PMs experience in their role may include some or all of these elements and in a variety of sequences. The discussion that follows provides a brief discussion of the four elements of this integrated model of transformative learning to lay the groundwork for discussing how transformative learning can be more effectively facilitated for those who serve in peer mentoring or peer leadership roles.

Encountering trigger events. Researchers have consistently described how the transformative learning process is initiated by a stimulating event or situation. This class of experience is characterized by disruption, unexpected encounters, and feelings of uncertainty. Additional work has suggested that trigger events may introduce learners to *threshold concepts*,

or conceptual gateways that lead learners to think, speak, or act in previously inaccessible ways (Meyer & Land, 2005). Threshold concepts play a critical role in transformations of identity because they invite learners into a transitional space where they are positioned to develop new knowledge, skill, or identity (Meyer & Land, 2003). These concepts become particularly transformative when they increase access to and competence in engaging in the practices of a community or discipline (Krippendorf, 2006; Lave & Wenger, 1991).

Similarly, experiences that feature *breakdown* (Guignon, 2002), tension between past and present experiences (Clandinin, Huber, & Huber, 2006), or *expectation failure* (Schank, 2000), provide learners with opportunities to examine their assumptions and expand meaning. In sum it is the disruptive, unexpected, and challenging nature of these *trigger events* that leads learners to examine and reflect upon their prior assumptions.

Self-examination and reflection. Although experience initiates the transformative learning process, transformation is unlikely to occur unless trigger events are accompanied by meaningful reflection (Mezirow, 1990). A common theme in the literature on the relationship between reflection and transformation is the value of dialogue with other learners. This reflective discourse provides a forum for learners to collaboratively explore the meaning of their experience by questioning one another's assumptions, providing alternative interpretations of experience, and working toward common understanding. Indeed, Cranton (1994) has asserted that "when a person is interpreting the meaning of a new experience and examining the validity of prior learning, discussion with others becomes a vehicle for learning" (p. 27).

In a number of the studies reviewed, dialogue with others was cited as a key factor in facilitating transformative learning. For example, in a multi-institutional, longitudinal study of outcomes among academically underprepared and low-income students, Engstrom and Tinto

(2008) found that involvement in a learning community was highly predictive of academic success. Survey data from nearly 6,000 community college students were analyzed with cross-tabular and multivariate regression techniques to determine the independent effects of participation in a learning community on subsequent persistence. Though there are inherent problems with operationalizing persistence to graduation as a proxy for academic success, Engstrom and Tinto conducted follow-up interviews with students at 5 of the 19 participating institutions, which helped to strengthen their conclusions that learning community participation was transformative. Analysis of interview data identified dialogue with peers as critical in helping underprepared students shed their initial beliefs that they were unqualified for higher education, and embrace identities as “real” college students. Though the study did not directly examine the process of transformative learning, its findings provide understanding of how reflective discourse can support learners as they undergo transformations.

The reflective process initiated by trigger events is at the heart of transformative learning because it engages learners in a reconsideration of their previously held assumptions (Cranton, 1994; Mezirow, 2000). As learners reflect, either individually or as part of a dialogue with others, they identify those frames of reference that are in need of adjustment. This leads learners to explore new conceptualizations and meanings that are more consonant with their present experiences. This continuous cycle of reflection on experience, followed by subsequent adaptations in practice, parallels similar processes described in the literature on developmental evaluation (Patton, 2010), reflective practice (Schön, 1984), and theoretical flexibility in instructional design (Yanchar & Gabbitas, 2011). However, PM development is rarely described in terms of changes in evaluative or reflective capacity. Nonetheless, engaging in reflective evaluation of experience appears to be both a vehicle for and outcome of transformative learning.

Liminality: Exploration of new meanings and revisions of assumptions. Through reflecting on their assumptions and frames of reference, learners enter what has been described as a *state of liminality* (Meyer & Land, 2003). In this phase, learners question their assumptions and begin to resolve discrepancies between previously held beliefs and new understanding (Meyer & Land, 2005). Though learners have not yet fully adopted new beliefs or meanings, their reflection and questioning brings them to a threshold where they are confronted with a choice to either accept or reject their prior assumptions. Transformation only occurs in cases where learners either revise their meaning structures, or develop completely new frames of reference that are more aligned with their experience (Cranton, 1994; Mezirow, 2000). Because these changes can be troublesome and disorienting, learners often require support from others in the learning environment. Supportive teachers, mentors, or friends can help to provide a safe space where learners can question and revise assumptions, explore alternative perspectives, and receive validation for new ways of thinking (Brookfield, 1987). Transformation can also be facilitated through texts that introduce new knowledge and nudge learners toward revised assumptions (Cranton, 1994). Indeed, provocative readings can create tension between what is and what might be, and invite learners to consider other possibilities of thinking, feeling, and acting (Clandinin, et al., 2006). Regardless of the type of support provided, this liminal phase provides opportunity for learners to explore and reconceptualize their meaning structures, and then work toward more visible changes and eventual transformation

Integrating and internalizing new understanding. Based on the new insights that emerged during the liminal phase, learners make plans to test their new ways of thinking (Cranton, 1994; Mezirow, 2000). This experimentation phase positions learners to act upon their

new convictions and evaluate the degree to which their new frames of reference resonate with further experience (Mezirow, 1990, 1991). This iterative cycle of reflecting on experience, developing new assumptions, then testing these emerging theories against future experience is very similar to processes outlined in the field of formal evaluation (e.g., Fetterman, 2005) and design research (e.g., Edelson, 2002). If this period of testing proves that the new ways of thinking and living are valid and justifiable, learners move towards integrating these revised meanings into their everyday experiences (Brookfield, 1987). In contrast, dissonance between newly adopted perspectives and subsequent experience typically leads back into a liminal space where learners can continue to search for frames of reference and perspectives that align more closely with their lived experience.

Thus, the process of integrating and internalizing new understanding relies heavily upon learners' engagement in an evaluative process wherein they examine the coherence between new assumptions and actual experience. Indeed, this phase in the transformative process might rightly be understood as being made up of three interrelated processes: (a) experimentation and testing of new frames of reference; (b) evaluation of the utility of this new understanding; and, dependent upon the decision that results from this evaluation, (c) adoption and integration of the new frames of reference into everyday living. Indeed, formal approaches to evaluation outline how this process of self-reflection and reconceptualization can be facilitated for learners, describing it as an illuminating and liberating experience that enables participants to identify future learning opportunities and redefine their identities and future experiences (Fetterman, 1995).

Transformative Peer Mentor Learning

In the sections that follow, I discuss the four stages of transformative learning identified previously (i.e., trigger events, reflection, exploration, integration) and consider the implications of transformative learning research for PM development and how PM experiences can be designed in ways that support transformative learning for students who serve in peer leadership roles. While some studies on PM learning have provided hope that transformative growth can and does occur for some PMs (e.g., Harmon, 2006), the bulk of the research on PM learning has largely focused on describing learning *outcomes*. Though their use of qualitative methodologies offers insight into the types of experiences that promote transformation, none of the studies has specifically addressed the transformative potential of the PM role or discussed how the literature on transformative learning can be applied to facilitating transformative experiences for PMs. In what follows, the research literature on PM development and transformative learning is integrated to provide guidance for how the PM experience can be structured to increase the likelihood that PMs will experience transformative learning.

Trigger events in peer mentor experience. In the studies reviewed, unexpected challenges, as well as exposure to new and perspective-shifting ideas, seemed to be critical in initiating transformative experience among PMs. Similar to the assertions made by transformative learning researchers (e.g., Guignon, 2002; Mezirow 2000) with regard to the role of trigger events in transformative learning, disruption and surprise nearly always preceded transformative outcomes in the studies of PM learning that were reviewed. These trigger events seemed to fall into two categories: (a) direct experience with troublesome and unforeseen situations and (b) exposure to new ideas and threshold concepts (Meyer & Land, 2005) that disrupted PMs prior ways of thinking or acting.

Transformational learning was most commonly initiated through PMs' direct experience with unfamiliar, challenging, or problematic aspects of their practice. Consequently, rather than being protected from those parts of their role that may be frustrating or uncomfortable, novice PMs should be exposed early to educative trigger experiences that help them to confront inaccurate assumptions, identify ineffective practices, and begin the shift toward a more accurate understanding of their work. As Brookfield (1987) and Mezirow (2000) have suggested, the productive discomfort that result from these experiences seems to be critical in encouraging PMs to start down the path to transformation.

Whether it was working with a resistant protégé (e.g., Bunting, et al., 2012), dealing with feelings of failure when protégés underperformed (e.g., Holloway & Salinitri, 2010), or searching for solutions to ambiguous problems (e.g., Harmon, 2006; Hughes, et al., 2010), this class of experiences seemed to be quite educative for PMs in the studies reviewed. For example, in one study of preservice teachers mentoring at-risk youth, participants described the challenges inherent in supporting apathetic, underprivileged, and underprepared mentees, as well as how grappling with these challenges led mentors to important realizations about what it means to teach and learn (Garza & Ovando, 2012). In this qualitative study of 59 preservice teachers (35 female), researchers used a grounded theory approach to examine how participants connected pedagogical knowledge to the process of mentoring at-risk peers. Constant comparative analysis of questionnaire data revealed that through these experiences PMs deepened their understanding of student success, learned to develop personal relationships with students, and developed a professional identity as educators. Further, this learning emerged as PMs were forced to adapt their mentoring approach in order to effectively support students who were struggling, apathetic towards learning, or resistant to the initial efforts of their PM to provide assistance.

While PMs in Garza and Ovando's study (2012) frequently linked their learning to overcoming challenges encountered in their mentoring, one reason for the frequency of these comments was likely the fact that participants were asked explicitly to describe the challenges they faced in their relationships with protégés. It is unclear whether PMs would have cited challenges as critical factors in their learning without being prompted to do so. The findings of this study are strengthened because, unlike other qualitative research exploring PM learning, the study was large and included a much higher percentage of male PMs. These features help increase trustworthiness of the findings, lend credence to studies with smaller sample sizes, and extend understanding of the PM experience, particularly among male PMs. In this and other studies, unexpected challenges with students provided opportunities for PMs to begin the transformative process by questioning prior assumptions, reconsidering their philosophy of mentoring, and developing improved strategies for supporting protégés, particularly those who were at-risk. Based on these findings, it is recommended that those who administer PM programs identify potential triggers of transformative learning for the PMs in their particular setting and then thoughtfully consider how to expose PMs to these experiences in supportive ways that lead to transformative growth.

Although direct experience with students was one of the most common triggers for transformative learning among PMs, meaningful growth also resulted when PMs were provided with opportunities to grapple with new conceptual ideas and theories relevant to their mentoring practice. Thus, it is recommended that PM training and development programs include thoughtful efforts to expose PMs to texts and conversations that introduce them to new ways of thinking about learning, teaching, and mentoring. This new knowledge, like the *threshold concepts* described previously (Meyer & Land, 2003, 2005) appears to have an intervening effect

in that it leads PMs to interrogate their initial assumptions about mentoring, and then begin to move toward more refined understanding of the purposes and practices undergirding their role as mentors.

In some cases this new knowledge came through formal reading assignments (Bunting, et al., 2012); however, conversations with supervisors and structured dialogues with other PMs (Harmon, 2006) were also common sources of these new and paradigm-shifting perspectives. In a study of 10 preservice teachers (3 female; 5 Hispanic, 3 Asian, 2 white) serving as mentors to at-risk English Language Learners, findings suggested that transformative learning, while influenced by direct experiences with at-risk students, was largely facilitated through the introduction of new knowledge through course readings (Ahn, 2011). This exposure to new theories and ideas through course readings challenged participants' prior assumptions about teaching English Language Learners and deepened the disorienting impact of these experiences. In a similar study of 49 undergraduate students participating in a service-learning mentoring program in high-poverty high schools (Hughes, et al., 2010), participants connected their course work and class discussions to their mentoring experiences, which triggered transformed views of the nature of poverty, the characteristics of productive mentoring relationships, and the complexity involved in addressing poverty.

While the specific nature of the trigger events across the studies varied, being a PM provided the challenge, surprise, and novelty necessary to induce the questioning and reflection that could lead to transformation. Accordingly, those responsible for the training and development of PMs should be aware of potential trigger events that naturally arise in the everydayness of PM experience, as well as those trigger events that could be facilitated through designed educational experiences. Indeed, high quality PM learning environments should

provide opportunities to leverage both types of trigger events by encouraging integrated learning through formalized learning activities (e.g., readings, discussions) that supplement the educative experiences that arise organically as PMs interact with students (Bunting, 2011). Ultimately, these trigger events should lead PMs to engage in the reflection necessary to move them toward transformation.

Reflection and discourse in peer mentor transformation. A second theme that emerged across studies exploring PM learning was the critical role of reflection. In alignment with the work of Mezirow (2000) and Cranton (1994), reflective activities seemed to provide opportunities for PMs to make meaning from their experiences and begin to question their prior assumptions. The two most common types of reflective activities in the studies reviewed were (a) reflective discourse within mentors' learning communities and (b) structured written reflections.

One of the most powerful and frequent sources of transformative learning for PMs in the studies reviewed was participation in learning communities that provided opportunities for reflective dialogue. Accordingly, attempts to design high-impact PM learning experiences should include consideration of how to engage PMs in discourses—with both peers and supervisors—that support the construction of new and refined ways of thinking with a view to improving practice. Additionally, these conversations are a useful tool for supporting PMs in making meaning of the trigger events discussed previously.

A number of the studies described how reflective conversations positioned PMs for transformative learning. In Harmon's study (2006), PMs learned through participation in monthly group meetings where they shared their struggles and reflected on common challenges. In the Bunting et al. study (2012), PMs arrived at new understanding and modified behaviors by

participating in small-group discussions. Finally, in Garza and Ovando's study (2012), in-class reflections among cohorts of preservice teachers provided a space for interpreting their experiences with protégés and making meaning from the challenges they faced. In general, the studies included in this review concluded that PMs' engagement in dialogue about their experiences allowed them to reflect on new ideas, challenge assumptions, and clarify understanding.

While the majority of studies identified reflection and dialogue as critical in transformation, a narrative study of prospective Australian university students from traditionally under-represented demographic groups found that discourse did not facilitate transformation among participants (Benson, Hewitt, Heagney, Devos, & Crosling, 2010). Nonetheless, Benson et al.'s study did identify personal reflection as critical, and its conclusion that reflective discourse fails to promote transformation appears to be an anomaly.

Though cited less frequently than collaborative discourse, written reflection was also a common source of transformative learning for PMs in the reviewed studies. In cases when PMs are concurrently enrolled in a formal course or seminar focused on mentoring, written reflection could be integrated into existing course activities or assessments. In the absence of a formal course, program administrators and mentor supervisors might explore other opportunities to engage PMs in written reflection (e.g., at the beginning and end of a semester). These opportunities to reflect in writing, both formally and informally, appeared to be critical in helping PMs identify, clarify, and express how their mentoring experiences facilitated their personal and transformative growth.

Engaging in written reflection—whether it was as a member of an online learning community (Bunting, et al., 2012), part of a capstone assignment (Holt & Berwise, 2012), or in

written reports sent to a supervisor (Heirdsfield, Walker, Walsh, & Wilss, 2008)—was a powerful way of supporting PMs in working toward transformed views of their mentoring practice, their own academic habits, and their future lives as working professionals. Further, PMs' learning seemed to be augmented even more when their written reflections became the basis for subsequent reflective dialogue with others. For example, in a study of the impact of mentoring at-risk peers on preservice teachers (Holloway & Salinitri, 2010), participants wrote weekly reflections and then shared these reflections in regular class discussions with both their peers and a supervising faculty member. Additionally, faculty members responded to these reflections in an electronic forum and engaged PMs in additional dialogue about their learning. Through this discourse, PMs modified their perspectives on what it means to be at-risk, what constitutes success among at-risk students, and how teachers can be effective leaders (Holloway & Salinitri, 2010).

Whether it is written reflection or discourse with others, reflective activities seem to provide opportunities for PMs to question their assumptions and explore new ways of thinking. Further, when reflection and dialogue are integrated and made part of the everyday practices of a community of PMs, learning is deepened as PMs begin to consider the implications their learning might hold for future experience. This forward-looking perspective contributes to the continuity and cohesiveness that Dewey (1997/1938) described as a critical feature of the type of educative experience promoting personal transformation. Specifically, as PMs reflect on their experience they are provided with opportunities to move toward modified perspectives, revised assumptions, and new questions that represent the beginnings of transformation.

Navigating liminality: Providing support for exploring new meaning. Peer mentors' entry into the liminal phase was often disorienting, frustrating, or uncomfortable as they were

faced with the prospect of disruptive change to their established ways of thinking and acting. Learners often resist transformation because it threatens the perspectives and patterns to which they have become accustomed through prior experience (Bowen, 2005). For example, in one study exploring student assumptions about the purposes of open dialogue (Trosset, 1998), researchers surveyed 200 undergraduate students and asked them to indicate whether it would be possible to have a respectful and balanced group discussion about a variety of sensitive issues (e.g., the role of race in individual differences). Additionally, participants were asked why they would or would not want to engage in a dialogue about this set of issues. Results of the study suggested that students viewed collaborative discourse, not as an opportunity to be exposed to diverse viewpoints, but rather as an opportunity to convince others of one's already strongly held beliefs. Similarly, through their interviews with 20 PMs at a large public university in the western United States, Colvin and Ashman (2010) found that PMs experienced a great deal of vulnerability in their role as they engaged in experiences and conversations that called their assumptions into question.

Because of the potentially challenging nature of being in between initial assumptions and the formation of new perspectives, PMs should be provided with safe learning environments where they are supported in exploring new beliefs and values. A common feature in the reviewed studies was PMs' participation in some sort of learning community (e.g., Beers & Davidson, 2009; Benson, et al., 2010; Exposito & Bernheimer, 2012; Harmon, 2006) where they regularly convened to share experiences, explore new concepts and ideas, and support one another in overcoming challenges. For example, in a study of preservice teachers serving as mentors to English Language Learners, Ahn (2011) found that mentors shifted their frame of reference toward teaching second language learners and adopted an individualized approach

based on students' current level of proficiency. This learning emerged as mentors participated in a learning community where they engaged in weekly discussion groups focused on exploring relevant literature, and then wrote weekly reflections that served as the source of dialogue within an online discussion forum. Though mentors' assumptions were challenged through their experiences, as well as by the new ideas they encountered in their reading, the support of their learning community allowed them to persist through this discomfort and work toward transformation.

When PMs are part of a safe, open, and supportive learning environment, they appear to be more likely to allow themselves to be vulnerable in articulating their assumptions, being open to new sets of beliefs, and adopting modified frames of reference. Most importantly, this safe space invites PMs to act on and test new understanding, which then leads them to the concluding stage in the transformative learning process.

Making transformation visible: Integrating and internalizing new understanding.

When PMs encountered trigger events, were given opportunities to reflect on and share their emerging thinking, and were then supported in acting upon this new meaning, they were positioned for transformation. Indeed, transformative learning is characterized by the integration of new thought patterns, modified values, and the adoption of new practices (Mezirow, 1990). A number of studies described the PM experience in ways that suggest this integrative and transformative learning does occur for many PMs through their everyday mentoring experiences.

In Bunting, et al.'s study (2012), PMs adopted new perspectives toward learning, most notably a sense of personal responsibility for their educational experience. This modified frame of reference led them to refocus their mentoring efforts upon helping first-year students adopt this mindset. Additionally, PMs took up new academic habits and practices that were

representative of this new orientation to learning. Over time, as PMs experimented with these new practices, they realized the value of taking a deep approach to learning and integrated their new practices into their student identities.

A similar shift in identity was observed in studies exploring the impact of mentoring upon preservice teachers. For example, participants in Garza and Ovando's study (2012) took up a professional identity as educators, shedding the superficial practices they engaged in earlier in their academic careers, and adopting an integrated set of beliefs, values, and practices aligned with what could be expected in a professional teacher. Likewise, participants in Holloway and Salinitri's study (2010) developed more sophisticated understanding of their role as teachers by recognizing the need to share power with learners and provide meaningful opportunities to make decisions related to their learning.

Though the specific nature of the transformative learning experienced by PMs varied across studies, it was visible in the way PMs described their new ways of thinking. Further, in the studies that included PMs' own narratives about the learning process, they frequently finished their stories by hinting at the process Clandinin and Connelly (2000) labeled *re-living*. In this process, PMs applied and operationalized their new knowledge, by envisioning and describing what their transformed practice would look like in the future (Bunting, et al., 2012; Harmon, 2006). These commitments to action were indicative of transformative learning and revealed how PMs' modified actions and behaviors flowed from their newly adopted meaning perspectives. In summary, it is important that PMs be supported in articulating their new understanding, as well as describing how their learning impacts their actions. This practice, and others that allow space to articulate such commitments, holds promise for both revealing the

transformative learning that PMs are experiencing, as well as providing additional reflective opportunities that can further the transformative process.

Conclusion

Past studies have demonstrated that PMs benefit in a variety of ways through their mentoring experience. This review builds on these studies by integrating the research literature on PM development and transformative learning, and providing recommendations for how the PM experience can be structured to increase the likelihood that PMs will experience transformative learning.

This integration of transformative learning theory and research on PM learning has several implications for practice. First, transformative learning is characterized by fundamental changes in perspective, accompanied by new ways of feeling and acting. Though past research exploring PM learning has alluded to the transformative aspects of PM experience, this review demonstrates that being a PM does hold transformative potential. However, transformative learning should not be assumed to be a natural outcome of any and all PM experience. Rather, transformation is made possible when institutions attend to the key elements of a holistic PM learning environment. Specifically, transformative PM learning environments include intentional efforts to provide

- trigger events that can be leveraged to induce questioning of assumptions;
- focused reflection on experience;
- relationships and community practices that support and encourage PMs as they explore new meaning and adopt modified practices; and
- opportunities to articulate and act upon new understanding.

Second, though deliberate efforts to provide transformative learning environments increase opportunities for transformation, it is important that practitioners understand that transformative learning is not a foregone conclusion resulting from successful application of a series of steps. Rather, the potential for transformation among PMs seems to exist when PMs choose to become meaningfully engaged in activities and environments that offer opportunities to be transformed. This meaningful engagement can happen both tacitly, through learners' participation in routine or everyday tasks; or more deliberately, as they participate in designed experiences facilitated and provided by others. Regardless, the findings of this review suggest that PM transformation occurs through interplay of both individual actions and environmental features.

Third, this focus on creating transformative learning environments for PMs also necessitates a shift in perspective toward PM learning. While PM programs commonly emphasize *training*, and attempt to facilitate learning along narrow knowledge and skill domains related to the basic functions of the PM role, transformation is rarely considered. This review has suggested a new paradigm for PM learning, focused on providing opportunities for PMs to be transformed by their experience. When institutions shift from *training* to *transformation*, and make intentional efforts to design environments where transformative learning is possible, PMs are more likely to experience holistic, durable, and integrative growth. Traditional training activities intended to familiarize PMs with their specific duties and the purposes of the mentoring program of which they are a part are still valuable, particularly in protecting against negative mentor outcomes such as burnout, mismanagement of time, and role misunderstanding (Keup; 2010). However, to maximize the potential for transformative learning among PMs, institutions

should look beyond simply providing basic training, and consider how they might provide a truly growth-promoting experience for those who serve as PMs.

Finally, when PMs experience this type of growth they not only improve their ability to act in the narrow role of mentor, they are transformed in ways that can influence and enrich the entirety of their experience. Given the focus in higher education upon providing educational experience that impacts learners beyond the classroom, facilitating transformative PM experience seems a worthy endeavor. Indeed, one of the foremost purposes of any educational experience should be the transformation of self.

There are several theoretical limitations to this literature review that should be noted. First, there is no commonly accepted definition of peer mentoring in higher education literature (Dawson, 2014). Consequently, it can be problematic to generalize research findings on PM learning in one setting to settings where peer mentoring is defined or structured differently. Accordingly, the recommendations made in this literature review may not have universal application or relevance for all PM programs or settings. Similarly, learning is a complex phenomenon that is difficult to define and influenced by a number of factors. Consequently, any attempt to define, describe, or guide it will inevitably be limited. Finally, transformative learning is viewed by many researchers as a rigid and narrowly defined theoretical construct. Accordingly, some readers may find theoretical faults with this review because it applies transformative learning more broadly. While the interpretation of transformative learning put forth in this review extends beyond the definition provided by Mezirow, a number of other researchers have defined and described learning in ways that suggest transformation (e.g., Krippendorff, 2006; Lave & Wenger, 1991; Meyer & Land, 2003). This review has merely

integrated these convergent views to provide a description of transformative learning that can be applied more flexibly and across a diversity of settings.

The findings of this study suggest several directions for future research. First, studies examining a broader segment of the student leader population could provide understanding of how PM learning compares to the learning experienced by students in other peer leadership positions. Further, research examining PMs in settings outside of undergraduate education would provide helpful understanding of how PM learning outcomes vary across these groups. Finally, researchers should continue to address questions surrounding PM learning using a variety of methodological approaches. As noted previously, the majority of research on PM learning has employed qualitative methodologies. Consequently, as this body of literature continues to grow, there will be increasing need for meta-analyses that both synthesize and quantify key findings that emerge across the research discourse on PM learning. Additionally, the field would benefit from more formalized models of PM learning, as well as subsequent efforts to employ structural equation modeling or other quantitative analytic techniques to validate these models.

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Article #4: Using Reflective Story Cycles to Facilitate High-Impact and Integrated Learning among Undergraduate Peer Mentors

**Using Reflective Story Cycles to Facilitate High-Impact and Integrated
Learning among Undergraduate Peer Mentors**

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Abstract

This study reports on an intervention designed to integrate undergraduate peer mentors' learning across a diverse set of experiences, including formal training, authentic practice, and prior experiences with mentoring. The aim of the study was to examine how participation in small-group narrative reflection cycles, supplemented by theoretical readings, facilitated integration of propositional and narrative knowledge related to mentoring. Findings suggested that participants gradually moved from initial storied beliefs, to a state of disequilibrium and openness to new propositional knowledge, to an eventual integrated knowledge based on and manifested through statements describing new actions and future practices. Based on these findings, recommendations are made for how formalized peer mentor training experiences can be designed to facilitate high-impact and integrative learning for undergraduate peer mentors.

Keywords: knowledge integration, peer leader, peer mentor, narrative analysis, reflection, story cycles

Using Reflective Story Cycles to Facilitate High-Impact and Integrated Learning among Undergraduate Peer Mentors

Peer mentoring is increasingly being recognized as a key component of the high-impact practices necessary for achieving essential higher education learning outcomes (Brownell & Swaner, 2010; Keup, 2012; Kuh, 2008). However, the implementation of a mentoring program does not guarantee results. Indeed, best practices in peer leadership suggest that institutions should give careful attention to, not only the recipients of mentoring, but also the key agents charged with moving these programs towards their intended outcomes—the peer mentors (PMs) themselves. Accordingly, there exists a need for high-impact training and development models which not only prepare PMs to perform the basic functions associated with their role, but which support them in developing an integrated conceptual understanding that can effectively guide decision-making and practice.

This study reports on the development and evaluation of a training model designed to integrate PMs' learning across a diverse set of experiences, including formal training exercises, authentic mentoring practice, and prior experiences with mentoring. The aim of the study was to examine how PMs' participation in small-group narrative reflection cycles, supplemented by theoretical readings, facilitated integration of their propositional and narrative knowledge related to mentoring relationships. Through a narrative analysis of PMs' reflective writing, the study investigated the way in which integrated knowledge gradually evolves and develops among PMs.

Theoretical Framework

In comparison to the research traditions of the physical sciences, the systematic study of learning is relatively new. Early prominent views of learning among psychological researchers were heavily influenced by epistemological stances and techniques imported from the physical

sciences (Slavin, 2003). Initially, theoretic accounts of learning from behaviorist traditions described it in terms of observable changes in behavior and thinking that are caused by experience (e.g., Pavlov, 2003/1960; Skinner, 1961; Thorndike, 1932). In response to the critiques of these early theories, the so-called “cognitive revolution” led to more humanistic accounts of learning that attempted to attribute causality to individual learners (e.g., Kahneman, 1973; Mischel, 1975; Piaget, 1952/1936; Shiffrin & Atkinson, 1969) and offered explanations of the internal cognitive processes involved in learning. While these perspectives provide an alternative to the environmental determinism at the core of behaviorist theories, they still call upon a modified form of determinism that describes human learning and action using mechanistic terms and processes of the mind (Williams, 1987). These two worldviews (i.e., behaviorism and cognitivism) have heavily influenced educational research and led many to conceptualize learning in mechanistic and causal terms (Yanchar, Spackman, & Faulconer, 2013; see also historical analyses by Leahey, 2003; Rychlak, 1988).

Thus, learning has traditionally been defined in ways that reduce it to the transmission of information, development of narrow sets of skills, or acquisition of reified domains of knowledge (Sfard, 1998). However, these positivist conceptions of learning fail to take into consideration the social and contextual nature of learning. Further, these definitions of learning seem inadequate in describing the shifts in identity frequently observed in intensive practices such as teaching and mentoring.

In contrast, this study approached learning as a transformative process of becoming a new or different person. Through this theoretical lens, learning is understood as a process through which learners integrate new experience with previously held assumptions to form increasingly refined frames of reference that guide future actions (Mezirow, 1997). Indeed, meaningful

learning and personal transformation occur through expansions and refinements related to both knowing and acting. These two domains of identity are intricately and reciprocally linked, influencing one another in a dynamic interplay—knowledge influencing action and action (particularly when coupled with reflection) contributing to new ways of knowing (Kolb, 1984; Lave & Wenger, 1991).

Thus, experience can be seen as a critical factor in this process of becoming through its influence on both knowing and acting (Dewey, 1997/1938). In educational settings, great attention is often focused on formal experiences associated with structured learning activities (e.g., classroom activities, training programs); however, equally important are learners' past experiences (typically informal) and the ways of knowing they carry forward based on these experiences. Ultimately, it is through a weaving together of experiencing, knowing, and acting that learners take up new identities and experience personal transformation (Kolb, 1984). From this perspective, learning comes to mean more than knowledge-acquisition or skill-development. Rather, increased knowledge and skill are subsumed by the more holistic process of developing a new identity (Lave & Wenger, 1991, Wenger, 1998).

Literature Review

The review of literature that follows begins by exploring theoretical descriptions of knowledge, the way it grows, and the role of experience in knowledge development. Next, research on the phenomenon of knowledge integration is reviewed to provide a theoretical rationale for the training model that is presented later. Finally, I provide a brief review of the literature on PM learning to illustrate that knowledge integration is a viable outcome for those who serve as PMs, but that there is a need for scholarship that provides practical guidance for how to facilitate this type of experience.

Ways of Knowing

Jerome Bruner (1987) has distinguished between two kinds of knowledge, which he termed paradigmatic and narrative. According to Bruner, paradigmatic knowledge is scientific and theoretic, and often presented in a propositional format, while narrative knowledge is represented in the stories or descriptions of lived experiences. Although Bruner viewed both ways of knowing as equally credible, other researchers have asserted that the fundamental structure of knowledge is narrative (e.g., Schank, 2000). In his work on the relationship between narrative and intelligence, Schank argued that learners develop schema or *story skeletons* through their experiences making sense of and learning from the world. Additionally, as learners gain experience, tell stories about experience, and read theoretic or propositional accounts of the world, these orienting skeletal stories evolve. As these schemas are modified, clarified, and expanded, they come to reflect the integration of propositional and narrative knowledge (Schank, 2000).

In studying the way in which knowledge influences practices like teaching and mentoring, Fenstermacher (1986) framed the distinction between formal and informal knowledge using a perspective informed by philosophical argumentation. He argued that formal knowledge, similar to paradigmatic or propositional knowledge, can be represented in syllogisms, wherein two or more premises point to a logical conclusion. In contrast, practical knowledge can also be represented as a series of propositions, but these beginning premises end in an action or behavior, rather than a concluding proposition. Research based in Fenstermacher's work has further suggested that interrogation or reflection on action positions practitioners to uncover personal assumptions, theoretic knowledge, and values as they relate to lived experience (Morgan, 1993).

In sum, although researchers have used a variety of terms to describe how knowledge grows through experience, the overall body of research on adult learning has suggested that experience plays an integral role in learning. Further, reflection on experience contributes to deeper learning by facilitating the formation of *story skeletons* (Schank, 2000) or a *conceptual sense* (Yanchar & Gabbitas, 2011), that can then be used by practitioners to engage in what Fenstermacher has called *practical rationality* (1986). Further, the interplay of experience and reflection appear to be essential in the process of integrating knowledge across past experiences in ways that influence future experience and practice.

Knowledge Integration: Personal Practical Knowledge

With regard to the issue of knowledge integration, Clandinin (1985) has described what she labeled *personal practical knowledge*, an integrated and holistic way of knowing that includes what learners know from their personal lives, from formal study and thinking, and from experiences and actions within their educational practice. She asserted that “actions are both the expression and origins of the personal knowledge of the actor” (pp.361-362), suggesting that while learners use this unique type of knowledge to guide practice, it can also be “seen” through both actual practices and the stories learners relate in describing and reflecting on these practices. According to Clandinin, this kind of knowledge grows in experience and includes the knowing brought forward from previous experience, current formal learning experiences (e.g., course readings, scholarly work), and learners’ current practices (e.g., in the classroom, lab).

Although Clandinin, specifically, examines teaching practice in her scholarship, this conception of *personal practical knowledge* can also be used to account for the way in which knowledge is integrated and guides practice in other interpersonal actions where the purpose is to facilitate learning and growth (e.g., mentoring relationships). Additionally, *personal practical*

knowledge is useful in terms of theorizing about how knowledge integration contributes to the shaping of individual identity by encouraging the articulation of *stories to live by* (Clandinin, Huber, & Huber, 2006). These *stories to live by* grow out of experience and are made up of a set of generalized assumptions and expectations that, together, guide one's actions and practice in particular contexts (Connelly & Clandinin, 1999). This conceptualization of the learning process aligns with the theoretical framework outlined above and further illuminates learning as a process of becoming (Greene, 1995). Indeed, learners' *stories to live by* are in a continual state of "shifting" and transforming, in response to both past and current experiences (Clandinin, et al., 2006; Yanchar & Gabbitas, 2011).

Similarly, Moon (1999) has argued that reflection is a powerful tool for revealing how practice is influenced by experience, background knowledge, and new learning. Further, her work has suggested that as learners reflect and come to understand their practices more deeply and clearly, they can be more intentional in their practice. Dewey (1997/1910) also argued that meaningful learning and growth come about through a process of open, responsible, and whole-hearted reflection on experience (Dewey 1997/1938).

The *personal practical knowledge* and integrated learning described by the research reviewed previously aligns with the essential twenty-first century learning outcomes outlined by the Association of American Colleges and Universities (2011). While past research has identified a set of 10 high-impact practices in undergraduate education (2008) that foster these learning outcomes, peer leadership or peer mentoring also seems to provide excellent opportunities for experiencing integrated learning. Indeed, research on the benefits that accrue for those who participate as PMs suggests that knowledge integration might be seen as one of the most powerful outcomes for those students who actively engage in mentoring their peers.

Integrated Learning among Peer Mentors

A great deal of research has identified the positive outcomes associated with PM programs on college campuses for those being mentored (e.g., Astin, 1993; Colvin & Ashman, 2010; Cuseo, 2010) and, more recently, studies have uncovered the tremendous benefits that come to those who serve as mentors (e.g., Bunting, Dye, Pinnegar, & Robinson, 2012; Ender & Newton, 2010; Harmon, 2006). Although the primary purpose of PM programs is to provide mentoring support to protégés, the PM experience also benefits those who serve as PMs (Shook & Keup, 2012). Astin's Involvement Theory (1999), which posits that student learning is directly correlated with the quantity and quality of students' involvement in their learning experience, provides understanding of why being a PM may hold such strong potential for meaningful growth. Indeed, because of the amount of energy and time PMs invest in training, meeting with students, and other mentoring-related activities, they could be rightly considered to be highly involved in their PM role. Consequently, PMs are positioned to experience a great deal of learning through their involvement in their mentoring work.

One source of this learning for PMs is the formalized training and preparation they receive as part of their role. While establishing an effective approach to PM training is an essential component to creating a sustainable peer mentoring program (Esplin, Seabold, & Pinnegar, 2012) and prepares PMs to function effectively in their role, well-designed training also increases the potential for the PM experience to become a *high-impact practice* that fosters deep reflection and integrative learning among those who serve as PMs (AAC&U, 2011). However, training is too often only narrowly viewed as a means of “bridging the gap between students' capabilities when hired and the skills needed to be effective peer leaders” (Esplin, Seabold, & Pinnegar, p. 94).

To illustrate, in the 2009 Peer Leadership Survey administered by the National Resource Center for the First-Year Experience and Students in Transition, nearly 83% of peer leaders reported that their training lasted one week or less (Keup, 2010). Clearly, formalized training is not the only means by which PMs can experience integrative learning; nevertheless, a one week training experience is not likely to facilitate the “integrative and applied learning” or “application of knowledge, skills, and responsibilities” that are the hallmarks of a twenty-first century educational experience (AAC&U, 2011). While the PM experience holds potential as a high-impact practice, this potential is more likely to be realized when those who administer PM programs or initiatives provide training experiences that are ongoing, reflective, and intentionally designed to facilitate integrated learning.

The research exploring both knowledge integration and PM learning suggests that integrated PM learning experiences are possible; however, past work in these domains has yet to explore how this process can be facilitated more intentionally, particularly through participation in formal training exercises. This study examined how narrative and propositional knowledge intertwined to become practical knowledge that guide interactions in a first-year mentoring program. Specifically, the aim of the study was to examine how participation in a designed developmental intervention (a structured story cycle process) facilitated integration of propositional and narrative knowledge among undergraduate peer mentors (PMs).

Method

Participants and Sampling

Forty undergraduate PMs in a first-year learning community program at a private, faith-based institution in the western United States participated in the study. Participants were organized into nine groups (approximately four to five PMs in each) to facilitate their

engagement in a series of collaborative story-telling, reading, and reflection cycles. While PMs could have been invited to participate in these activities individually, past research into the learning of peer leaders has suggested that participation in reflective dialogue within an established learning community helps to provide transformative learning and integration of formal knowledge with practical experience (e.g., Ahn, 2011; Exposito & Bernheimer, 2012; Garza & Ovando, 2012; Harmon, 2006). Further, providing participants with the opportunity to engage in discourse with other learners seemed to be a means of facilitating the *social negotiation* that allows individuals to test their emerging understanding against the thoughts of others and reflect on the variance among their individual perceptions (Bruner, 1961).

After collecting narrative data from these 40 participants, a negative case analysis was conducted to strengthen the credibility of an initial set of descriptive themes (Williams, 2012). This analytic process involved a search for cases that contradicted the hypotheses developed through analysis of the narrative data collected. Traditionalists of this approach advocate for the refinement of conclusions until they account for all known cases without exception. However, this seemed an unreasonable standard given the influence of individual learner differences on observable outcomes. Consequently, for this study, negative case analysis was used to quantify the number of cases that contradicted each theme identified in the initial narrative analysis. Through this analytic process initial themes were refined and clarified to more accurately represent the patterns of knowledge integration that were consistently observed across the majority of participants. Though the final themes presented below did not rise to the level of accounting for every known case, they did describe nearly 75% of the 40 cases collected for the study.

Following the negative case analysis described above, Patton's strategy of *intensity sampling* (2002) was applied to select a single group of four PMs as the focus of more in-depth analysis. *Intensity sampling* involves a search for information-rich cases that provide focused insight into a particular phenomenon (Patton, 2002). This approach to *purposeful sampling* is commonly used to select cases that illuminate the specific research questions under study (Maxwell, 2004).

Using these strategies, four PMs were selected and focused upon in reporting study findings: Andrea, Holly, Becca, and Monica. This particular group (a) had completed all of the required activities for each of the narrative cycles; (b) was made up of PMs with varying levels of experience; and (c) were, collectively, the most articulate in their reflective writing, which allowed more insight into how their understanding and knowledge developed across their participation in the cycles.

Context for the Study

Each PM worked with a learning community of about 40 students who were enrolled in a cluster of linked courses. Their responsibilities included meeting individually with students two to three times per semester; attending learning community classes with students; connecting students with faculty members; supporting the development of effective academic habits (e.g., note-taking, exam preparation, time management); facilitating peer-to-peer connections; and assisting students in accessing campus resources (e.g., academic advisors and teaching assistants).

The data for the present study were collected during PMs' participation in a summer training program. The purpose of this summer training was to support PMs in developing a basic conceptual and philosophical understanding of mentoring that would position them to more

effectively support the first-year students they served. In order to facilitate this development, the readings and written reflection prompts were oriented to elicit narratives of past experiences with mentoring, facilitate connections between experience and theory, and encourage PMs to embed the core values of the peer mentoring program in the practical knowledge that guided their work with first-year students.

Data Collection

The research design for the study was based in narrative inquiry practice (Clandinin & Connelly, 2000) and engaged participants in a cyclical process of story-telling and reflection. Narratives and reflections were submitted through an on-line learning management system; consequently, while PMs were acquainted with the others in their narrative group, they interacted asynchronously in an on-line environment, from a variety of locations.

Each cycle included (a) an initial response to a prompt designed to elicit the articulation of a past experience related to mentoring, (b) the reading of theoretical and instructional texts, and (c) interpretive response to group members' narratives and reflections. In the first phase of the cycle, PMs composed field texts, which took the form of stories of past experiences with mentoring, teaching and learning, and the challenges of being a new college student. In the second phase, PMs worked collaboratively to interpret the meaning of their stories by composing *interim research texts* (Clandinin & Connelly, 2000) describing commonalities and common themes across the set of narratives from Phase one. In the third, PMs read instructional texts (e.g., articles, book chapters) and then constructed a reflective response to an orienting question. Finally, in the fourth phase, participants were invited to construct a final synthesizing response which integrated the insights that emerged across the group and clarified their learning for the cycle. In this way, engagement in the cycles and the construction of their responses were

orchestrated to reveal how narrative and paradigmatic knowledge became integrated. Indeed, the design of the cycles provided insight into the development of the *personal practical knowledge* described by Clandinin (1985), including the ways in which PMs made common meaning from story, the ways in which past experience shaped knowledge about mentoring, and the role of propositional or formal knowledge in the interpretation, re-interpretation, and re-living of experience.

Data Analysis

Analysis involved the use of qualitative data analysis techniques applied in a systematic iterative and analytical cycle (Miles & Huberman, 1994). Narrative and reflective data were compiled in a Microsoft Excel file, which facilitated analysis of both a single participant's response set, as well as within all participants at a single phase in the cycle. This approach made it possible to consider how individuals integrated storied and formal knowledge within their own texts, and how both the propositional texts they read, as well as the narrative and propositional responses of their peers influenced development of knowledge. From this perspective, two patterns of knowledge development were observed: (a) the way individual PMs integrated propositional and narrative knowledge, and (b) the ways in which the collaborative discourse within the group contributed to meaning making.

The entirety of participants' story-telling cycles (i.e., narratives and responses) were read and analyzed, facilitating the identification of individual and collective patterns of meaning making and knowledge integration. Narrative inquiry methods were then used to move from field notes (original narrative data) to interim reports (analytical and interpretive notes on the narrative data), and finally to research texts (the basis of this article). Working iteratively in individual and collective cycles of interpretation and seeking resonance among the responses,

provided a basis for developing trustworthiness in interpretations and analyses of the data (Clandinin & Connelly, 2000; Stake, 2010). Although a variety of standards exist for ensuring and evaluating the trustworthiness of qualitative studies, those outlined by Lincoln and Guba (1985) and Guba and Lincoln (1989) (i.e., credibility, transferability, dependability, confirmability) were adhered to for this study. These standards were met through prolonged engagement at the inquiry site, iterative analysis of the narrative data collected, rich descriptions of participants' experiences, and careful efforts to confirm emerging interpretations through subsequent literature searches.

Findings

The narrative research practices described above led to two sets of findings: new understandings about the role of narrative in the development of integrated knowledge in undergraduate PMs and new understanding about how particular elements of the designed story-cycle intervention contributed to PM development. The first category of findings responded directly to the research question for the study, while the second provided insight into the design of experiences that support and reveal the integration of experiential (narrative) and propositional (paradigmatic) knowing in the development of *personal practical knowledge* (Clandinin, 1985). I begin by sharing a descriptive model of the way in which integrated knowledge gradually developed among most participants, followed by a description of what was learned with regard to designing and using story cycles to both integrate propositional and narrative knowledge, and promote the development of *personal practical knowledge* (Clandinin, 1985) among undergraduate PMs.

A Pattern for Integrated Knowing: Toward deepening personal practical knowledge

Analysis of the data, as described in the Methods section above, suggested that for a majority of participants, integration of propositional and experiential knowledge followed a pattern, wherein PMs gradually moved from initial beliefs about a phenomenon or issue (e.g., mentoring, challenges of the first year of college), to a state of disequilibrium and openness to new propositional knowledge, to an eventual integrated knowledge based on and manifested through participants' asserted commitments to new actions and practices. In the sections which follow, quotations from PM narratives and responses are used to describe each of the phases of this cycle, as well as to illustrate the general process of integration observed across PMs' participation in the story-telling and reflection cycles developed for the study.

Initial storied beliefs. Analysis of the initial stories told by participants in the first phase of each cycle suggested that PMs selected narratives to share based on what they already believed or implicitly knew about the content area for the cycle (e.g., mentoring, practices of successful first-year students). Indeed, this was the most strongly supported aspect of the model for integrated knowing that was observed in the analysis of PM narratives, appearing in the opening narratives of all 40 participants. Initial understandings seemed to be embedded in these introductory narratives and revealed the pre-existing values and beliefs PMs brought with them to the story cycle process. Monica's initial story from the introductory story cycle focused on mentoring is illustrative. Monica was the editor of the yearbook during her senior year of high school and relied heavily upon her relationship with the yearbook advisor, Mrs. Black. In response to a prompt inviting PMs to share a story describing a time when they were mentored in a personal way, Monica reflected on a particularly overwhelming evening working on the yearbook and the difference Mrs. Black's mentoring made:

One night I was at school at 7 pm and had thrown my hands in the air, ready to throw the computer out the window. I was so frustrated and so discouraged. How was I going to create 200 pages of yearbook in 3 months when I had been working on a single page for 2 hours?! I complained to Mrs. Black who responded with: ‘Come on. We’re going out for pizza.’ . . . She said I needed to learn to take a break. So off we went. She talked to me about yearbook, and then just got completely silly and we laughed hysterically for a while. She told me later she did it to get my mind off the work. (Monica: Cycle 1, Response #1, 6 May)

The mentoring story related by Monica includes themes of friendship, support during times of difficulty, the importance of listening, and the value of humor. Later in her response to the prompt, Monica reflected on the difference that these elements of her relationships with Mrs. Black made for her growth:

I found a great mentor and friend in Mrs. Black. . . . She was so selfless, always there to listen to me when I was frustrated, discouraged, or overwhelmed. . . . She taught me many important lessons including patience, perseverance, and the importance of remembering to take a breath and a break. And, she always made me laugh—no matter how upset I got, she always reminded me to laugh, lighten up, have some fun. (Monica: Cycle 1, Response #1, 6 May)

This assertion from Monica came at the end of her first narrative and seemed to provide both a summary of the value of her relationship with Mrs. Black, as well as a rationale for why she selected this particular story as a story about mentoring. Thus, Monica’s initial beliefs about mentoring seemed to be embedded in her narrative about Mrs. Black and her telling of the story—with details about Mrs. Black’s support during challenging times, her ability to listen, and

use of humor—functioned as a storied definition of what Monica viewed as successful or effective mentoring.

In a similar way, each of the initial narratives analyzed for the study seemed to be storied representations of PMs' initial beliefs. Although very little new learning or integration appeared to be occurring during this phase (i.e., participants were merely telling stories and recalling experiences), later in the analysis it became apparent that beginning with story provided PMs with an experiential foundation upon which to build in subsequent phases of the cycles. While PMs were simply telling stories of past experiences, this narrative act appeared to serve, in some ways, as a modified form of the *concrete experiencing* Kolb has cited as critical in promoting experiential and reflective learning (1984). As Moon (1999) suggests, reflection can serve as a strategy for supporting learners in building cognitive representations or maps for guiding future learning. Inviting PMs tell a story of their learning provided an account of their initial understanding to which they could return throughout their participation in the story cycles. In this way, this account served as both a record of and resource for their learning.

Search for confirmation and explicit articulation of initial beliefs. In the second phase of the story cycle, PMs were invited to read one another's initial narratives and then provide a written response identifying (a) commonalities across the stories and (b) unique insights from individual members of the group. Analysis of these first-level responses provided evidence that, in their readings of one another's stories, PMs looked almost exclusively for data which would support the themes of their own introductory narrative. Although analysis of the stories showed that PMs' narratives were quite different from one another, there were only six participants of the total group of 40 that identified a story of another participant as unique from their own. And, in the small number of cases in which participants referred to a unique aspect of

another group member's narrative, a negative case analysis demonstrated that, in every case, these unique elements related to superficial aspects of the narratives (e.g., differences in setting or demographic attributes of key characters in the narrative). Monica's response to her peers' stories serves as an example of this consistent tendency of PMs to search for confirmation of their initial beliefs:

Our experiences in mentoring show that a mentor is someone who cares about a student as more than just a teacher relationship would require. Our mentors treated us like friends-- like equals that they were really interested in. . . . It was already pointed out that all our mentors seemed to add humor to situations that needed it, adding a more light-hearted feel to things. . . . They helped us learn patience and perseverance and the importance of laughter. (Monica: Cycle 1, Response #2, 9 May)

Monica's response to the set of stories generated by her group focuses almost exclusively on the prominent themes from her own story (e.g., friendship, perseverance, patience, laughter). For example, Monica asserts that the mentors in the set of stories all made humor a part of the mentoring relationship. However, a close examination of the other stories reveals important differences in humor's role in the mentoring relationships described. In Andrea's story humor emerges from the way in which she characterizes herself; in Becca's story, while the mentor is described as smiling, the relationship seems somewhat distant; and in Holly's case, her mentor laughed at her naïve behavior as a newcomer to organ practice. So, while humor is part of each of these narratives, Monica's observation that "all [the] mentors added humor to situations that needed it" seems overly simplistic and provides evidence that very little new learning has emerged for her during this phase of the story cycle.

Most telling might be Monica's opening assertion in this response: "I just finished reading the other responses, and I have to say I can't think of much else to say!" She seems to be indicating that nothing any of her group members said taught her anything or contributed to her understanding. Monica's statement here is representative of the general lack of new learning and integration observed among the group. Across the responses analyzed for this phase of the cycles, PMs "integration" largely consisted of identifying what their initial story revealed to them, followed by an assertion of the connection of their own ideas to the stories of the other PMs. They each articulated themes which supported the beliefs embedded in each of their own introductory narratives. Additionally, PMs' failure to articulate any unique insights they gained from the reading of group member's narratives, suggests a passive or subconscious resistance to changes in thinking about mentoring, the first-year experience, and the other topics at the center of the story cycles.

Grappling with the introduction of new propositional knowledge. At approximately the mid-point of each story cycle, PMs were invited to complete reading assignments intended to introduce new propositional knowledge into the dialogue. These readings were drawn from a variety of sources, including articles on mentoring, book chapters exploring issues of teaching and learning, and foundational documents describing the core values and learning outcomes for undergraduate students at the institution where the study was conducted. This additional propositional knowledge seemed to have an intervening effect in that it consistently led individual PMs, as well as the group as a whole, to a re-framing of their dialogue around the new themes and issues brought forward by the texts. This re-framing and reconceptualization associated with the readings for the story cycles was observed in 27 of the 40 participants, suggesting that, while not all participants were influenced by the reading in a significant way, the

introduction of new propositional knowledge was influential in helping the majority of participants work toward new and more refined understanding.

For example, in the first cycle focused on mentoring, PMs were invited to read an article written by a former PM in which he shares insights gained through his mentoring experience, as well as characteristics of effective mentoring relationships (Dye, 2004). One prominent theme from the article is the power of example in peer mentor interactions, a theme cited by Holly in her response to the reading:

I was reading Becca's post, and she commented that it is important to help students realize the academic difference between high school and college. How do we do this? One of the ways I think would be to be an example of that difference, something Becca and Andrea commented on. (Holly: Cycle 1, Response #3, 10 May)

While the role of example was touched on briefly by one group member (Becca) in her initial narrative for this cycle, it is entirely absent from all of the PMs' responses to each other's stories. It was not until the concept of example was introduced in the reading that it began to become visible in PMs' mentoring schema. It is important to recognize that, for Holly, it was her reading of both the article and her peers' responses that positioned her to reframe her perception of mentoring to include the importance of example and role-modeling for protégés. However, her peers were not positioned to see the value of example, or to articulate their thinking about it in their written responses, until this concept was introduced by way of a propositional text.

Across responses to the readings, PMs appeared to experience a state of *disequilibrium* (Piaget, 1952/1936), *expectation failure* (Schank, 2000), or *cognitive dissonance* (Festinger, 1957), in which their initial beliefs were called into question by the propositional knowledge introduced into the dialogue by the readings. The propositional texts pushed them to identify

elements of their original stories that they had not noticed in their first responses. Holly's identification of Becca's statement about mentors as examples is one such insight. Additionally, in their responses to the readings, PMs were more likely to quote or refer back to stories that illustrated concepts or ideas, rather than propositional assertions from the texts. This action facilitated re-framing of their thinking and construction of new meaning. Thus, not only does narrative provide a means of deepening experiential knowledge, it also seems to be an important tool as learners connect their own experiences to and make meaning from sources of propositional knowledge.

In Dye's article about his experiences as a PM, he shares rich narrative descriptions of how his thinking about mentoring was refined over time, intertwined with interpretation of stories linked to propositional knowledge undergirding his analysis (2004). Peer mentors' frequent references back to these narratives indicate that the understandings provided by the propositional aspects of the text were critical in pushing forward their evolving understanding. These stories seemed to hold power for PM learning because of their resonance with PMs' own experiences. Peer mentors viewed Dye's narratives as similar enough to their own stories about mentoring that these descriptions were viewed as credible. However, it was the interpretive elements of the text, more than the narratives alone that led to learning. The contrast between Dye's stories of mentoring and their own became instructive. Through Dye's interpretations of his experiences, as well as PMs' reflection on their narratives, they were led to re-visit the details of one another's stories and re-consider what they initially believed. Thus, it appears that to be most effective in promoting learning, propositional texts should occupy a tenuous space wherein they are viewed by learners as credible, authentic, and authoritative, while still providing new insights and fresh perspectives (Bullough & Pinnegar, 2001).

Expansion, revision, and new questions: The beginnings of integration. Further analysis of PMs' responses to the propositional texts introduced in the cycles, revealed a much higher degree of integration between propositional and experiential knowledge than in previous phases of the story-telling cycle. As described above, this shift seemed to be associated with PMs' attempts to bring together storied knowledge from past experience, with what was sometimes conflicting knowledge from propositional sources. It was hoped that by inviting PMs to articulate written responses to their reading, while also considering the narratives and responses submitted during previous phases of the cycle, they would be nudged into a space where they could confront and grapple with new questions, evolving understanding, and conflicting beliefs. Again, though this outcome was not observed in every case, there was strong evidence for the critical role of readings in moving PMs toward integrated understanding of the concepts addressed in the story cycles. Analysis of responses to the readings suggested that, for 30 of the 40 participants, these readings contributed to the intertwining of past experience and new propositional knowledge.

As was commonly seen across PMs' responses, Monica's reading seemed to begin a process of re-framing in the way she viewed mentoring relationships. In her initial narrative and first response (cited previously), Monica frequently refers to her mentor, Mrs. Black, as a friend. Additionally, the descriptions she provides of her experiences with Mrs. Black suggest that Monica views mentors as occupying a fairly didactic teaching role wherein they give advice, answer questions, and teach lessons in direct ways. However, after completing the readings for the cycle, Monica's understanding begins to evolve and shift, as evidenced by her written response to the reading:

After reading Dye's 'Peer Mentoring' information, I especially thought about the . . . responsibilities of a peer mentor. . . . It talked about how a peer mentor is not a therapist or buddy, but is a coach. . . . I think a lot of times, when you're placed in a leadership role, the lines become a little fuzzy. It reminded me of how parents are counseled to be parents to their children-- not to try to be their friends. . . . I thought that was kind of like what we're doing-- we're meant to be Peer Mentors- to encourage and guide, but we should not try to be 'buddies' with our students. . . . We should be helping our students be better in a way that they will be able to maintain after their time with us is over. We should not allow them to become too dependent on us in any way. (Monica: Cycle 1, Response #3, 15 May)

Monica's response is helpful in understanding how PMs integrate experiential and propositional knowledge through both expanding and revising their initial beliefs as revealed in their opening narratives. First, the emphasis on developing caring interpersonal relationships embedded in Monica's first narrative and subsequent response is still evident in her reflection above. However, her conception of mentoring relationships has been expanded to include a more refined understanding of the unique nature of mentoring relationships, including the need for mentors to foster growth in a way that positions protégés to continue learning after the mentoring relationship has ended. Additionally, her use of the terms "guide" and "coach" are evidence of her expanding understanding of the way in which PMs facilitate learning for first-year students (i.e., that PMs promote learning through indirect ways, rather than through more explicit or overt methods of teaching).

Monica's integration of experiential and propositional knowledge also includes a revision of previously held beliefs. As illustrated by the quotation above, her reading of Dye's article

pushed her towards a reconstruction of her beliefs about mentoring and friendship. Note her comment describing how PMs “should not try to be ‘buddies’” with their students, and the way in which she is beginning to distinguish between mentoring relationships and more traditional friendships. When compared to her original descriptions of Mrs. Black—who is repeatedly portrayed as an older and wiser *friend*—these statements demonstrate significant contrast and the first signs of abandonment of a belief now viewed as suspect (i.e., that mentors are not all that different from friends). In this process, Monica also begins to re-think both her relationship with Mrs. Black, as well as the kinds of relationships she will seek to develop with her own protégés.

Integration of experiential and propositional knowledge was also facilitated at this phase of the cycle by the new questions which grew out of PMs’ reading and reflections on the responses of others in their story cycle group. Again, these questions seemed to come in response to PMs’ efforts to reconcile the new propositional knowledge introduced through the readings with the narratives (both their own and those of their colleagues) which had been shared previously. For Andrea, new questions came as she reflected on her emerging understanding of the importance of example, along with her experiential understanding that opportunities to be an example might be limited due to the nature of the mentor-student relationship:

Dye discussed the impact that his roommate had on his experience here and the way he approaches his classes. . . . The question I have is: How can I have the kind of influence on my students that Dye's roommates had on him? They [referring to the students she mentors] unlike Dye, do not have the chance to see those things by living with me. So, how can my students know how important my education, social, and spiritual aspects of my life are to me so that I can have that kind of influence? (Andrea: Cycle 1, Response #3, 11 May)

In her response, Andrea voices her struggle with how to be an example to her students, and communicate who she is and what matters to her, without living with them, having daily contact, or making didactic statements. While she has not articulated it yet, she seems to be beginning to see the need for a more intimate, open, and honest relationship with her students in which she is clearer about who she is and what she believes. At the core of her wonderings is the question of how she can enact these new practices in her own context and place.

As illustrated in the quotations from this and the previous section of the article, the introduction of propositional texts into the story-cycle dialogue appeared to play a critical role in pushing learners towards a re-examination of original beliefs. Additionally, inviting written reflection on how the reading related to the narratives shared previously provided space for learners to move towards an integrated form of knowledge as they considered how experience and paradigmatic knowledge acquired through more formal learning activities (e.g., the reading of texts), could be woven together in new and meaningful ways.

Re-callings, re-tellings, and looking ahead: The emergence of personal practical knowledge. Analysis of PMs' final synthesizing responses for each cycle revealed a return to narrative and a reliance on storied representations of knowledge. For these final responses, PMs were invited to, first, review all of the stories and responses from the cycle (both their own and their peers). Next, the prompt invited them to identify and articulate the commonalities and unique themes across all of the responses, using details from their own experiences or those of their peers to support their assertions. Through analysis of these summative responses, I identified evidence of the emergence of personal practical knowledge in 25 of the 40 participants.

Integration of propositional and experiential knowledge became apparent, first, in the re-tellings and re-interpretations of the narratives shared in phase one of the cycles. In describing what they had learned and how their understanding had grown across the cycle, PMs frequently returned to the original narratives the group shared in the first story-telling phase. Although the narrative elements of the story (e.g., setting, characters, and events) had not changed, PMs' new knowledge gained through participation in the story cycles re-positioned them to see the stories from new perspectives. In her final response from the first cycle, Becca re-tells her own story as well as those of her peers:

As I've been reading back through all of our responses, it's been interesting for me to see how many things I noticed that were similar that I didn't realize before. In several of our posts, we talked about the importance of example in helping those that we mentor. I think Mrs. Black was an example to Monica of being able to have fun when times are stressful. She took Monica out for pizza and got her laughing and having fun. Miss Moss [the mentor Becca describes in her initial narrative] was also that way for me. She was always seeing the good in things and people, and it made me want to be more like that. (Becca: Cycle 1, Response #4, 16 May)

Becca's new knowledge about the role of example in mentoring relationships led her to re-examine the stories she and Monica told at the beginning of the cycle and re-interpret them as stories about example. This conception of Becca's final response as a re-telling of the original stories is underscored by her statement about the way in which she now sees "how many things . . . were similar that [she] didn't realize before." Although she is reflecting on the same stories as she did earlier in the story cycle, she sees them from a modified position, leading to a re-interpretation grounded in her integrated knowledge comprised of both experience (i.e., the

stories) and proposition (i.e., the theme of example from her reading). These re-tellings became evident in the way in which PMs reinterpreted once overlooked details from earlier stories and used the new understanding that came from their readings and reflections to attach new significance to past experiences.

In addition to re-telling previously shared stories, these synthesizing responses elicited new stories, which revealed PMs' clarified, revised, and expanded understanding. In telling these stories, PMs seemed to be both providing examples in support of their assertions about the content of the cycle (e.g., mentoring relationships), as well as testing their emerging understanding against what they knew from past experiences. Listen for these elements in the new story Becca told as she worked to clarify her knowledge about the role of questions in mentoring relationships, another of the prominent themes from her reading:

I've been thinking about how several of us were wondering how we could find the right questions to ask. . . . I thought of a particular time when my peer mentor had asked me a question that helped me to see things in a different light. I had stayed up late to study for a test or a quiz and told my peer mentor Heather about it. Heather then asked me if that had been beneficial to me. That made me think about what I could have done differently that would have been more beneficial. As I was thinking about this experience, I realized that Heather's question had helped me to see that my life wasn't in balance." (Becca: Cycle 1, Response #4, 16 May)

Becca's closing assertion ("As I was thinking about this experience, I realized. . ." and "I was thinking about these questions . . .") provides strong evidence that this final phase of the story cycle process led to a greater depth of reflection than she had engaged in up to this point in the cycle. Further, her portrayal of this experience as a story about asking questions in

mentoring relationships reveals her new beliefs—based in both her own experience and her reading—about the responsibility PMs have to promote learning and growth through thoughtful and well-timed questions.

Finally, PMs frequently finished the story cycle by hinting at the process Clandinin and Connelly name *re-living* (2000). Envisioning what their practice would look like in the future, they applied and operationalized their growing knowledge. In the initial analysis these forward-looking assertions were labeled as “Commitments to Action;” however, upon further analysis these statements were seen as a unique type of narrative—one which, returning to Fenstermacher’s conception of *practical rationality*, describes actions or behaviors which flow from a set of practical knowledge propositions (1986). As she reflected on her experiences from the previous two story cycles, Holly told a story describing what her future early-semester interactions with students would look like:

How can we use this? I think NSO [New Student Orientation] will definitely be a big part of our first attempt to get the students attached to the institution. . . . The interviews at the beginning of the semester can help us get to know the students, but I think they could be even more useful if we were to know a little about the students beforehand so when they come in we can move right to connections and helping students see for themselves their reason for attending school here. . . . In order to really help students, we need to learn who the students are on an individual basis, and this is a little hard with a big group. This becomes more manageable when we study the students' autobiographies before they get here and utilize the first few introductions with them at NSO and the first few days of school to get to know them. (Holly: Cycle 2, Response #4, 30 May)

Note the subtle connections back to the theme of relationships and knowing students in personal ways, a prominent theme from the first cycle. Additionally, Holly has begun to integrate propositional knowledge about a sense of belonging, finding purpose, and the importance of relationships, with her experiential knowledge about PMs' role in new student orientation and the individual meetings PMs have with students during the opening weeks of the semester. However, rather than making generalized assertions about these themes, Holly represents this new knowledge by telling a story of what she hopes her first interactions with students will look and feel like. Her text (i.e., "How can we use this?") hints at an ongoing consideration of how to establish interpersonal connections. She seems to be wondering what strategies (e.g., reading the short autobiographies submitted by students) could be helpful to her in coming to know students prior to meeting them for the first time.

Such stories about PMs' future practice, although still fictional and waiting to be enacted, revealed their emerging *personal practical knowledge* (Clandinin, 1985) and represented an intertwining of propositional and experiential knowledge that emerged across the story cycle process. Indeed, participation in the story cycle process seemed to have encouraged PMs to take up a narrative orientation (Yanchar, 2011) in which they became more aware of the meanings of their past experiences, re-evaluated the meaning of these experiences in light of the new understanding that came through their readings, and then further integrated these two sources of understanding by envisioning and articulating how future experiences might be different as a result of their emerging understanding.

Design Principles for Promoting the Development of Personal Practical Knowledge

The findings of this study suggest that being intentional in deepening *personal practical knowledge* (Clandinin, 1985) and facilitating learners' entry into a community of practice (Lave,

1991) requires thoughtful organization of groups and careful structuring of experiences. First, groups should include a *more knowledgeable other* (MKO) (Vygotsky, 1978) who scaffolds the thinking of the group and asks questions or makes responses that push the dialogue forward. In many educational settings, this role would be played by a teacher; however, as illustrated in this study, an experienced and capable peer can also fill this role. In the case of a reflective story cycle group, this experienced peer should not only be highly familiar with mentoring practice and key mentoring concepts, they should also have a clear understanding of the desired learning objectives of the story cycle process. Operating from this understanding of the goals of the reflective process, they can more intentionally guide, support, and scaffold the learning of the other members of the group. Specifically, the MKO within a story cycle group should (a) model effective discourse (e.g., by demonstrating effective means of sharing past experiences, connecting principles from readings back to the experiences of group members, and making connections across the contributions of the various members of the group); (b) be a skilled observer and listener, so as to identify the needs of individual learners within the group and ways of supporting their learning; (c) promote deeper learning through the use of reflective questioning and raising of new perspectives; and (d) understand when and how to fade back, allowing other group members to assume more responsibility for driving the discourse. Indeed, as the process grows, different participants may emerge and take up this role within and across the various conversations.

Second, the selection of the right propositional text is as a critical component in facilitating a transformative and integrative learning experience. Because the goal of the readings in the story cycle process is to invite learners to confront previously held assumptions and move them toward clarified understanding, the selected text should be closely aligned with

the specific outcomes for the story cycle (e.g., a refined understanding of the interpersonal nature of mentoring, importance of promoting deep learning), as well as the broader PM learning outcomes for the particular program implementing the story cycles. A thoughtfully selected text will introduce new and more sophisticated themes into the discourse of the story cycle groups and, more importantly, provide a degree of anomalousness and unfamiliarity that catalyze the questioning and reflection that are at the heart of the integrated learning process (Cranton, 1994; Meyer & Land, 2005; Schank, Kass, & Riesbeck, 1994). Indeed, the selection of propositional texts may be one of the most critical design principles for promoting the development of personal practical knowledge among PMs.

Third, engaging in written, rather than merely spoken reflection plays an important role in facilitating learning for PMs in the ways articulated by Moon (1999). The written records generated through the story cycle process—including records of their thinking, initial responses, and thoughts surrounding readings—positioned learners to more easily build on existing understanding and understandings developed during the cycle, and then return to questions raised in these records. Without any written record of this evolving thinking, learners would have been forced to rely upon memory, which inevitably fades across time. In this way, producing and then using their written records to examine and re-examine their thinking provided a scaffold that seemed to push PMs' knowledge construction deeper. Additionally, learners' integrated and narrative-based understandings of theory become more available for their analysis and application in subsequent experiences.

Fourth, across analysis of the data set (beyond the analysis of the four participants shared here) the importance of timing was apparent. Learners should have flexibility in the timing and development of their individual and collective responding. While there needs to be enough

space for thinking about and developing understandings within and across cycles, the cycles should be close enough in proximity that they can push forward the tacit understandings being developed (i.e., those present in early texts, but not always made explicit).

Finally, while participants had multiple opportunities to reflect on their own and each other's experiences throughout the story cycle process, there seemed to be particular power in inviting PMs to articulate a final synthesizing reflection. When participants were invited to return to and reconsider all phases in the cycle, they built richer connections among their insights and tighter integration of thinking and experience. Thus, this final response can become a powerful space for deepening reflection and grappling with both new questions and conflicting ideas that learners may have previously ignored or overlooked. These activities seem to lead learners to a re-interpretation of their past experiences, and a linking of both the propositional knowledge from readings and the experiential knowledge drawn from their co-learners. Indeed, the final reflection appears to be a critical element in moving from discussing understandings to making commitments and identifying concrete actions that learners will take based on their emerging and strengthened *personal practical knowledge* (Clandinin, 1985).

In sum, when educators engage learners in experiences such as story cycles they may not attend carefully to the construction of groups, crafting of reflective prompts, issues of timing, or the juxtaposition of experience, narrative, and propositional texts. Rather, they may be more likely to extend simple invitations for learners to "reflect" on what they have learned, with minimal guidance as to how to engage in this reflection or what, specifically, upon which to reflect. This study illustrates how multiple, semi-structured, and intertwined experiences in reflecting, sharing with others, reading texts, and then reflecting again is potentially more

powerful than merely asking students to “reflect on experience” and submit these reflections for teacher commentary or evaluation.

Conclusion

This study explored how narrative and propositional knowledge become intertwined in the experience of PMs. Story cycles, based on work by Clandinin and Connelly (2000), were used in order to make this integration more visible. Analysis of the story cycle data revealed a pattern of how narrative knowing gradually emerges and then helps to integrate both experiential and propositional knowing. In this process, participants also bring forward their *personal practical knowledge* (Clandinin, 1985) and develop new identities as PMs who engage in interpersonal relationships oriented to providing guidance and support for novice learners. Thus, with Clandinin, I argue that the actions described through narrative “are both the expression and origins of the personal knowledge of the actor” (1985, pp.361-362).

This study also contributes understanding of how to structure or design experiences for the development of *personal practical knowledge* (Clandinin, 1986) that positions educators to work in roles like those of PMs. Indeed, taken together, the findings of this study describe a pattern for the process of personal practical knowledge development among undergraduate PMs. Further, analysis of the narrative data collected in the study suggest that PMs pass through a number of stages as they move toward personal practical knowledge, including (a) initial storied beliefs; (b) the explicit articulation of these beliefs or assumptions; (c) grappling with new ideas introduced through propositional texts; (d) the expansion and revision of original assumptions based on new knowledge; and (e) an emerging personal practical knowledge that becomes apparent in “re-tellings” and articulations of future practices. Further, articulating experiences, reporting understandings from readings, using groups to provide more capable others, and

requiring written reflections—both along the way and at the end of the experience—appear to be vital in this process and help facilitate a weaving together of propositional and experiential knowledge. In short, for “theory . . . to influence practice . . . it must be translated through the personal” (Bullough & Pinnegar, 2001). Ultimately, this integration leads learners to tell new stories, strengthening their commitment to make strategic changes in their practice and to act more intentionally in their educational roles. Thus, the stages described in this pattern, in addition to the design practices I have described for facilitating this type of experience, comprise an emergent model that can inform future research and practice.

In sum, providing opportunities for PMs to participate in intentionally-designed developmental or training experiences like the story cycle process described here are one way in which peer mentoring and peer leadership can move toward being rightly described as high-impact practices. While the everyday experiences associated with being a PM—including meeting with students, modeling effective learning strategies, and learning how to skillfully support others in their learning—clearly provide opportunities for PM learning, this study argues that a *high-impact peer mentoring experience* is one that includes *designed interventions* that leverage the existing learning potential embedded within the everyday experiences of peer mentoring. As Kuh has suggested, “key conditions can be adapted and incorporated into any teaching and learning situation inside or outside the classroom to promote higher levels of student performance” (2010, p. ix). The story cycle process reported on in this study is one such example of the way in which the PM experience can be adapted to promote higher levels of learning for those who serve as PMs. Indeed, this experience and the learning environment where it was situated incorporated many of the characteristics of high-impact practices, including an investment of time and energy beyond the basic responsibilities of PMs, interaction with peers

about substantive matters related to mentoring, real-world applications of the new meaning PMs were developing, frequent feedback on PMs' emerging ideas, exposure to diverse perspectives of peers, and integration of knowledge through structured reflection (Kuh, 2010; Kuh, O'Donnell, & Reed, 2013). Thus, the findings of this study provide a rough framework for facilitating training experiences that contribute to integrated learning for PMs. By drawing upon this framework and the principles it describes (i.e., reflection on past and present experience, theoretical readings, dialogue with peers, integration of theory and experience, and articulation of new understanding) those who administer peer mentoring programs can be more intentional in providing a truly high-impact experience for those who serve as mentors.

Because the set of findings shared here are based upon a single study of a small group of PMs, future research should be conducted to validate the effectiveness of the story cycle process, as well as the pattern of knowledge integration proposed here. Additionally, subsequent studies based in design research methodologies, could be used to both develop new approaches to promoting knowledge integration among PMs, as well as to evaluate and refine the more general framework for integrated PM learning introduced.

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Dissertation Conclusion

The growing research exploring the positive outcomes for undergraduate students who serve in PM or related peer leader roles, as well more recent suggestions that peer leadership is emerging as a high-impact practice in its own right (Keup, 2012), have necessitated additional scholarship examining the learning peer leaders experience in their efforts to support and serve their fellow students. Further, there is particular need for studies that analyze cases of transformative or holistic learning among peer leaders, as well as inquiries into the types of experiences and environments that seem to most effectively support this more integrative and durable learning. This dissertation, with its four related articles, responds to these gaps in the literature by initiating a research agenda focused on extending understanding of (a) what PMs learn, (b) what types of experiences contribute to transformative learning, and (c) how those who administer peer mentoring programs can be more intentional in designing environments and experiences that support high-impact PM learning. Indeed, a synthesis of the findings that emerged across the four studies in this dissertation provides new understanding for all three of these aspects of my research agenda.

Transformative Learning among Peer Mentors

First, with regard to what PMs learn through their mentoring experiences, this collection of articles both confirms the findings of prior research on PM learning, as well as advances understanding of the transformative potential of being a PM. Past research has reported that those who serve as PMs develop improved academic habits, such as time management skills, writing ability, and analytic capabilities (e.g., Ender & Newton, 2010; Harmon, 2006; Shook & Keup, 2012); as well as and strengthened interpersonal capacity, such as presentation and facilitation skills, and empathy (e.g., Astin, 1993; Russel & Skinkle, 1990). The findings of

Article #1 (Understanding the Dynamics of Peer Mentor Learning) and Article #3 (Transformative Mentoring) confirm these findings regarding PM learning outcomes, while also illustrating that this learning extends beyond simple measures of narrow outcomes to more comprehensive and internalized changes. For example, Article #1 provides evidence that being a PM led participants to take up fundamentally different approaches to their own educational experiences, such that both their attitude toward learning, as well as their actual practices became oriented toward a deep approach to learning. Article #3 illustrates that, under certain conditions, PMs experience learning that extends beyond their mentoring experiences and into their philosophies, practices, and identities as new professionals (e.g., reviews of Garza & Ovando, 2012; Holloway & Salinitri, 2010), particularly for those pursuing careers as educators. Likewise, Article #2 (Stories of Transformation) provides rich evidence that the interpersonal abilities—including listening, empathy, and reflective questioning—and reflective habits PMs develop through their mentoring experiences are frequently applied to new settings and situations outside their mentoring role.

Thus, this cluster of studies provides an integrated argument that being a PM not only leads to mentor learning, but that it has the potential to contribute to the type of rich learning experience described elsewhere as immersive, comprehensive, and even transformative (Meyer & Land, 2005; Meizirow, 1997). Accordingly, the overall findings that have emerged across this dissertation echo and add strength to Keup's assertion that "it is quite likely that peer leadership is an emerging high-impact practice in support of 21st Century Learning Outcomes" (2012, p. 2).

However, for an educational practice to be rightly categorized as *high-impact*, it must include a constellation of key pedagogical and environmental elements that, together, contribute to a high-quality and potentially transformative learning experience. As described previously,

high-impact practices include those that significantly increase student engagement and that are characterized by

- an investment of time and energy;
- interaction with faculty and peers around substantive issues;
- opportunities for real-world application of learning;
- high expectations of students;
- frequent feedback on performance;
- exposure to diverse perspectives;
- opportunities for reflective and integrative learning; and
- personal responsibility and accountability for learning.

Though it is not necessary that a practice include each of these elements to be considered high-impact, and the configuration and design of high-impact practices will vary depending on both learner and institutional characteristics (Kuh, 2010), thoughtful integration of these characteristics provides a learning environment that supports achievement of 21st Century Learning Outcomes and transformative learning.

Characteristics of High-Impact Peer Mentor Learning Environments

Similarly, the collection of findings across this dissertation come together to suggest that transformative PM learning is possible when PMs are provided with experiences and learning environments that include a number of key features. Indeed, a triangulation of the findings of Article #2, with its examination of transformative experience among a small group of practicing PMs, and well as Article #3 and its review of cases of transformative PM learning from prior research, contributes descriptive understanding of the characteristics of high-impact and transformative PM learning environments.

First, PMs' engagement in purposefully-designed routines or everyday practices (e.g., formalized training, collaborative projects, or meaningful administrative work aligned with their mentoring responsibilities) provides opportunities for legitimate yet peripheral participation (Lave & Wenger, 1991) in the work of their mentoring community. In discussing the role of everyday practices in facilitating high-impact PM experience, it is important to differentiate between the meaningful practices I describe here, and the mechanistic approaches to training I critiqued in the introduction to this dissertation study (see p. 8 of the "Theoretical significance" section). Traditional approaches to training are highly focused upon conveying information, developing narrowly-defined skill sets, and at their worst, minimizing institutional liability. Accordingly, this type of training functions much like an "inoculation" that is administered to each "patient" in a universal way. The expectation is that by providing this treatment, PMs will be knowledgeable, prepared, and "trained" to fulfill their duties. Beneath the practices that comprise this training approach, is an often unexamined assumption of environmental determinism and mechanistic, industrialized processes of facilitating "learning."

In contrast, this dissertation argues for participation in *intentionally designed* and *purposeful* practices. Opportunities for meaning-making and deep understanding are provided through concurrent engagement in reflection, evaluation, and dialogue. Further, the goal of these practices is not to merely "train," but to contribute to a more holistic understanding of core values and principles. Through their involvement in thoughtfully designed and administered everyday practices, PMs come to understand the basic responsibilities of their mentoring role, but, more importantly, by *being* PMs and acting in the mentoring role, they *become* members of a larger mentoring community. This membership and participation are critical because they provide access to more advanced community practices (e.g., designing a reflection rubric,

mentoring less-experienced peers, see Article #2), broker interaction and dialogue with others in the community who can support their learning (e.g., supervisors, discussion group cohorts), and immerse PMs in a new everydayness that nurtures the development of refined habits, practices, and ways of thinking. As described previously in the Discussion for Article #2, these varied forms of structured involvement seem to place PMs on a *trajectory of participation* (Lave & Wenger, 1991) that, over time, has high-impact and transformative potential.

Second, across the studies I conducted, findings converged to provide joint support for the role of challenge and unfamiliarity in high-impact PM learning and transformation. For example, in my review of the literature reported on in Article #3, it was clear that *trigger events* and *disorienting dilemmas* played a critical role in facilitating transformative learning among PMs across a large collection of studies focused on PM learning. Similarly, in Article #2 I identified a class of growth-promoting or disorienting experiences, including those in which PMs employed *pretending* as a strategy for familiarizing themselves with new experiences, and described their role promoting transformative PM learning. Again, an examination of the findings across the collection of studies, points to the criticality of providing a PM experience that challenges PMs' established perspectives and practices, introduces new ways of thinking, and invites their engagement in unfamiliar practices. Whether naturally-occurring or designed, exposure to this type of experience is essential in fostering transformative PM learning.

Third, PMs' are positioned to experience transformative and high-impact learning when carefully-selected theoretical readings and propositional texts are woven into their experiences. Article #3 provides insight into the unfamiliarity that can be introduced through the strategic use of texts and theoretical readings that expose PMs to new ways of thinking about mentoring and learning. As with unfamiliar tasks or practices, well-selected readings can be used strategically

to challenge PMs' prior assumptions, thereby inviting them to explore new ideas and practice. This weaving together of formal, propositional learning with the valuable informal learning that arises through day-to-day experience both builds on learners' past and current experiences (Bransford, Brown, & Cocking, 2000), and introduces new concepts and information that serves to deepen, clarify, and expand PMs' *personal practical knowledge* (Clandinin, 1985). Further, the juxtaposition of meaningful experience with provocative readings augments the final two characteristics of transformative and high-impact PM learning experiences described below.

Fourth, high-impact PM learning experiences include a variety of opportunities to reflect upon and make meaning from both past and present experience. Across the studies, reflection emerged as a consistent theme in the transformative experiences of participants. Whether it is structured written reflection in response to a prompt, reflective dialogue with other PMs, or reflective conversations with supervisors, fundamental changes in thinking and practice seem to emerge when PMs are invited to step back and evaluate how they are being shaped by their experiences. In fact, engaging PMs in reflective practice might be considered a particular class of the unfamiliar and challenging experiences described previously. However, because of its prominence across the collection of studies, it warrants mention as an independent characteristic of transformative PM experience. It is also worth noting that all but the most advanced undergraduate students are relative novices when it comes to the purposeful use of reflection as a strategy for learning. Accordingly any attempts to incorporate regular reflection into PM practice, will require both scaffolding and patience as PMs become familiar with what it means to be reflective practitioners (Schön, 1984).

Finally, a synthesis of the findings of the collection of articles presented here, suggests that high-impact and transformative PM learning is most likely when PMs are part of a broader

mentoring community of practice that structures, supports, guides, challenges, and validates their learning. Such communities embody the characteristics of transformative PM learning environments discussed previously (i.e., structured routines, exposure to challenge, and reflection) and further leverage them by incorporating them into the practices of an established learning community. For example, the everydayness identified in Article #2 as critical in facilitating transformation, came about through PMs' participation in a mentoring community, with its accompanying protocols, expectations, and collaborative tasks. The educative challenges to PMs' assumptions and habits frequently came about through participation in a community process or through an invitation from another community member. Likewise, the explorations of new perspectives and practices necessary for transformative learning nearly always required support and encouragement from others. In truth, designing a high-impact peer mentor experience might be more succinctly described as facilitating the development of a learning community, or community of mentoring practice, that supports the balanced and holistic development of each individual in the community.

As mentioned in the introductory discussion that precedes the four dissertation articles, Article #4 reports on one attempt to apply the findings of the previous three studies toward the design of a PM learning experience that contributes toward knowledge integration and personal transformation. Clearly, participation in a single training or developmental experience does not constitute high-impact practice or, by itself, achieve transformative PM learning. However, Article #4 serves as one example of how the understanding of transformative PM experience supplied through this dissertation can be used to configure a learning experience that moves PMs toward transformation. The story cycle process highlighted in the article incorporates each of the elements of transformative experience discussed above: participation in a structured process (i.e.,

a series of guided reflections, readings, and responses), unfamiliarity in the form of theoretical readings, reflection on experience, and participation in a community of learners. Again, though findings did not provide unequivocal evidence of transformation, they did suggest that engagement in the story cycle process contributed to a more integrated understanding among PMs that both guided mentoring practice and began to flow into other aspects of their experience.

Toward a Theoretical Framework for Transformative and High-Impact PM Experience

In discussing the relationship between individual experience and more generalized understanding, Stake wisely noted that “transformation of knowledge from individual to aggregate and back is fraught with fraughtfulness” (2010, p. 18). Likewise, attempts to theorize about phenomena (particularly human phenomena) based on a small number of cases comes with a similar set of hazards. Nevertheless, I proceed down this path in hopes that the descriptive and generative theorizing I offer as I conclude this dissertation might prove fruitful, if for nothing else than initiating much needed dialogue regarding how peer mentoring and peer leadership might become more established high-impact practices in the undergraduate experience.

First, a word about *theory* and my use of that concept in the context of this discussion. When speaking of matters of *theory*, academic researchers have, traditionally, only narrowly considered *scientific theory*, which aims to describe and explain natural phenomena and processes. Fundamentally, these theories and the scientific activities that produce them are focused, primarily, on generating knowledge. While the explanations and descriptions that are at the core of scientific theory can and are applied by practitioners, they do not serve a prescriptive function. There is, however, another class of theory, separate and distinct from *scientific theory*, that emerges within educational practice and that provides practical understanding for the design

of experiences and environments that help to facilitate particular learning outcomes (Gibbons & Bunderson, 2005; Vincenti, 1990). This unique realm of theories includes what Edelson (2002) has termed *design frameworks*, which he characterizes as generalized design solutions for particular educational problems. Though a comprehensive discussion of this concept is far beyond the scope of this dissertation, as well as my limited understanding of design research, the concept of *design frameworks* holds intrigue for what I have earlier described as the *problem* of designing high-impact PM learning experiences. Further, it aligns with the notion of the *aesthetic design paradigm* described in the Theoretical significance section of this dissertation as well as in prior research (Bunting, 2012).

Though I did not set out in this dissertation to provide explicit theorizing about the PM experience, the findings that have emerged across the four studies serve as a starting point for the articulation of a still nascent framework of guidelines for facilitating high-impact PM experience. Indeed, the characteristics of high-impact or transformative PM learning environments I have described previously might be viewed as a framework for directing and leveraging the latent transformative potential of peer mentoring and peer leadership experience. However, rather than being viewed as a prescriptive model, dictating a narrow set of highly-defined practices, this framework is better viewed as a *generative theory* comprised of a coherent set of fundamental concepts that can be configured in a variety of designs. For example, as has been discussed previously, the unfamiliarity and challenge that trigger transformative learning might occur as a natural aspect of a PMs' experience, or through a designed intervention that introduces new unfamiliarity into the experience of a developing PM. Likewise, in advocating for reflective practice as a key component of PM transformation, I do not make any attempt to dictate a particular format or process for how this reflection should take place—personal written

reflection, group dialogue, or some other type of reflective activity are all likely to hold their own merit. Thus, the framework for high-impact PM learning I have proposed suggests a wide range of practices that can be incorporated into a diversity of peer leadership programs of varying sizes, scopes, and missions. Indeed, the characteristics of high-impact PM learning experience described in this framework (i.e., intentionally structured educative routines, unfamiliarity and challenge, reflection, and learning community support) constitute a portion of the “key conditions [that] can be adapted into any [peer leadership] situation . . . to promote higher levels of student performance” (Kuh, 2010, p. ix).

In proposing this framework for the design of high-impact PM learning experiences, it is important to return to a theme of personal agency introduced in the Conclusion to Article #2 (Stories of Transformation). Rather than offering up a mechanistic explanation or account for how transformation is caused among PMs, the findings of this dissertation reinforce the variability and uncertainty associated with learning. Though providing a peer leadership experience that integrates a number of characteristics of high-impact practices increases the potential for meaningful learning, transformation is ultimately dependent upon the interplay of both environmental and personal factors. As with any high-quality learning experience, peer leadership realizes its full transformative potential only when individual learners fully invest and engage in the opportunities afforded them. The role of practitioners, as well as institutions more generally, is to provide an environment that makes this type of PM experience possible. It is hoped that the findings that have emerged from this dissertation can contribute to those efforts.

Implications for Practice

While I have discussed and mentioned various practical implications for this research throughout the four articles, as well as in the discussion above, I offer a concise summary of

those implications here. First, as has been emphasized throughout my research and across the four studies, peer leadership and peer mentoring hold tremendous promise for enhancing the experience of the undergraduate students who serve in these and related roles (e.g., Resident assistants, peer advisors). Accordingly, as opposed to being viewed as merely a cost-effective means of administering large-scale programs (e.g., new student orientation, first-year seminars), or as an intervention that benefits only those who are the recipients of this service, peer leadership should be recognized as a high-impact practice in its own right. However, as with other high-impact practices, peer leadership will only fulfill its high-impact potential when institutions and those who administer peer leadership experiences take an intentional approach to incorporating key features into the experience they provide.

The findings of this collection of studies offer practical guidance for the design of high-impact peer leadership experiences and point to a number of key elements that should be considered when implementing or evaluating peer leadership programs. Specifically, high-impact peer leadership experiences are characterized by

- an explicit focus and emphasis upon the learning of the peer leaders themselves;
- engagement in legitimate and meaningful routines or everyday practices that support peer leaders in taking up new identities as peer leaders, accompanied by new ways of thinking, speaking, and acting;
- opportunities to engage in challenging and unfamiliar practices that involve real-world application of skills and knowledge;
- the integration of theoretical perspectives and conceptual understandings (e.g., theoretical readings) with authentic peer leadership practice;

- frequent and structured opportunities to reflect on and make meaning from both experience and formal learning; and
- membership and investment in a mentoring community of practice highlighted by high expectations, feedback, accountability, dialogue around diverse perspectives, and support from faculty and peers.

Together, this set of characteristics describes the structure or architecture of a high-impact peer leadership experience. Accordingly, those who administer programs that feature peer leaders might be rightly considered to be designers or architects of experience through their work studying and applying principles of experience. The practical framework offered here positions practitioners in first-year experience, residential life, student affairs, and other campus units, to create a variety of peer leadership experiences, in any number of institutional settings, and with a diverse array of student populations, all while using a common set of practical or structural elements. The particular configurations of these principles will be dictated and determined by the demands specific to each institutional setting, including the desired learning objectives for peer leaders, scope and size of the peer leadership program, available time and resources, and capabilities of individual peer leaders.

Finally, the architectural approach to designing high-impact peer leader learning environments that I have proposed in this dissertation will require a new type of practitioner, one with a fundamentally different perspective on theory than what is commonly seen in field of student affairs. Theory is, at first glance, somewhat of an odd thing to discuss in a section on practical implications. However, theoretical knowledge may be the most important tool at the disposal of a practitioner. Leonardo da Vinci put it best when he said “He who loves practice without theory is like the sailor who boards ship without a rudder and compass and never knows

where he may cast.” Indeed, when appropriately understood and applied, theoretical knowledge becomes a *conceptual tool* that brings intentionality, coherence, and power to all of the other design decisions that are made in the course of constructing a learning environment or learning experience.

My intent, here, is not to advocate for a particular theory or comprehensive theoretical perspective that should form the basis of all peer leadership programs. Rather, the architectural framework I have presented here suggests that the design of high-impact peer leadership experience requires a syncretic design woven together from a diversity of theories, each attending to a different layer or element of the design, be it motivation, development, learning, or supervision.

The belief in the existence of a comprehensive theory, one which can inform all aspects of practice, is common among higher education professionals, particularly student affairs practitioners. Accordingly, practitioners often naively hope, search for, and in some cases even believe they have found, a universal theory of practice that prescribes what to teach, when to teach it, and how. Indeed, many programs and curricula arise from a theoretical zealotry, largely unbalanced by any other frameworks or perspectives. Likewise, peer leadership programs grounded in narrow theoretical position, are inadequate in facilitating the types of complex learning they purport to advance (Eisner, 1984; Schwab, 1969), fail to acknowledge the design of peer leader experience as a process which must attend to a variety of interconnected layers (Gibbons, 2014), and, ultimately, are unable to successfully address unique and multi-faceted challenges which arise in practical design contexts.

This dissertation demonstrates the need for an approach to peer leader development that views theories as conceptual tools that can and should be skillfully woven together to inform the

design of meaningful, cohesive, and aesthetic experiences for learners. While a particular theoretical approach—be it a *relational leadership model* (Komives, Lucas, & McMahon, 2009), a *social change model* (Astin & Astin, 1996), or something else—an approach grounded in a single theoretical perspective will, ultimately, be an inadequate tool for making all decisions about the design of a learning environment. In short, each layer or aspect of the peer leader learning environment will present its own problems to be solved and require solutions informed by a slightly different set of theoretical perspectives (Gibbons, 2014).

On the surface, this practice of weaving together a diversity of theoretical perspectives might be viewed as eclectic. However, eclecticism in design is characterized not only by a reliance upon multiple theories, but, more importantly, by the lack of a coherent and articulated set of guiding beliefs or assumptions (Yanchar & Gabbitas, 2011), such that eclectic designers have no real theoretical basis for the design decisions they make. In contrast, the design of high-impact peer leadership experiences requires practitioners who operate from what has been described in instructional design literature as a “conceptual design sense” (Yanchar & Gabbitas, 2011, p. 385)—a core set of assumptions, beliefs, and values pertaining to the various aspects of learning and instructional design.

It is this conceptual design sense which positions student affairs practitioners, and others involved in administering peer leadership programs, to engage productively in what I term *theoretical weaving*, wherein one flexibly employs a wide variety of conceptual tools and theories, while relying upon a core set of guiding principles and theoretical assumptions to inform key decisions and bring coherence and meaningful connectivity to the overall design. This is not unlike Joseph Schwab’s view that curriculum specialists should take into account four *commonplaces*—learner, teacher, sociocultural milieu, and subject matter—and rely upon a

diversity of theories to develop curriculum that is cohesive, relevant, and responsive to all four of the commonplaces or layers influencing learning (1973). In earlier work, Schwab argued that curricular design requires skill in the eclectic and “practical arts” (Schwab, 1969, p. 10). However, it is important to note that Schwab described this eclectic “artistry” not as uniformed use of any and all theory, but rather as a “wrestle” with seemingly unconnected theories in an attempt to bring them together in a meaningful way. Thus, although initially labeled as eclecticism, Schwab’s conception of curricular design might be better described as a *syncretic art* and is similar to Yanchar and Gabbitas’ description of the way in which conceptual tools can be brought together to provide a basis for a cohesive set of guiding practices that a skilled designer or architect can employ in her craft according to the unique needs of a given design challenge (2011).

The process of constructing high-impact peer leader learning environments can thus be viewed as a *syncretic art*, requiring a particular type of designer. This type of student affairs professional must, first, have a broad understanding of a variety of theories which can inform the design of instruction, including but not limited to student development theory, learning theory, and instructional theory. This type of professional also reads widely outside the design field and becomes a *cross-pollinator* who can create new and better designs through the juxtaposition and integration of seemingly unrelated ideas and theories (Kelley, 2005). Second, in order to avoid the trap of eclecticism, practitioners should work to develop a well-articulated and increasingly clear philosophy of peer leader development. This will occur through engagement in frequent and critical reflection on practice, articulation of emerging understanding, and participation in dialogue and deliberations with others. As practitioners clarify and refine their philosophy and conceptual design sense, it can become a useful filter or meta-tool for identifying those theories

and conceptual tools which are appropriate for a given design challenge. Finally, theoretical weaving in student affairs practice requires what Aristotle termed *phronesis*, or an understanding of how to act wisely in particular situations (trans. 1962). More recently, Schwartz and Sharpe have described this ability to flexibly apply theoretical principles in real-world contexts as *practical wisdom*, or the ability to do the right thing, in the right way, for a particular situation (2010). This skill enables practitioners to flexibly apply and weave together a diverse set of theories to create designs which are simultaneously hybrid, intentional, and cohesive.

In summary, high-impact peer leadership experience requires a particular type of learning environment that incorporates the design features described above. It also requires a particular type of practitioner who can thoughtfully weave together a high-impact experience using a variety of theoretical and pedagogical approaches. Finally, as described previously, transformative and high-impact peer leadership experience ultimately depends upon individual learners who are willing to invest in their experience and learning by becoming full participants in the experience that is provided to them.

Recommendations for Future Research

This dissertation study is limited by the fact that it largely explored the experiences of PMs on a single campus, in a single peer mentoring initiative. Future research should be conducted in a diversity of peer leadership settings to evaluate the validity of the proposed framework for designing high-impact peer mentoring experiences. Specifically, studies that examine the impact of interventions whose designs are based upon this framework (like the study reported on in Article #4), including formalized training programs, credit-bearing peer leadership courses, and short-courses or workshops, will contribute additional understanding of the utility of these guidelines, as well as provide assessed examples of various configurations of the elements

in the framework. Additionally, for peer leadership to truly be considered a high-impact practice, it must meet the criteria that Kuh has described previously (2010). Specifically, it should be widely tested and demonstrated to provide benefits to students from a variety of backgrounds and across a diversity of settings. The framework offered in this dissertation helps to facilitate these advances by providing a set of guidelines that can be evaluated, refined, and expanded through subsequent inquiries into transformative learning among peer mentors, as well as other similar peer leaders on college campuses.

Additionally, as an emerging high-impact practice, peer leadership should be further analyzed to examine the existence of experiential or pedagogical elements not identified in the literature describing more commonplace high-impact practices (i.e., first-year seminars, service learning, and undergraduate research). Further research should be conducted to search for elements of peer leadership not mentioned in the framework described here, but that appear to be critical factors in contributing to transformative learning among those who participate in peer leadership roles. These analyses might contribute to an expansion of Kuh's taxonomy of characteristics by illuminating additional factors that are common across well-established practices, but that are, as of yet, unidentified.

The findings of this dissertation, when viewed alongside findings from the 2013 National Survey of Peer Leaders (NSPL), administered by the National Resource Center for the First-Year Experience and Students in Transition, also raise fruitful questions to be explored in future research. For example, NSPL findings suggest that first-year experience, academic advisement, and academic support units are the most common sponsors of the peer leadership experience (Young, 2014). However, peer leaders are also used in athletics, counseling and mental health capacities, judicial affairs, and many other settings. Future research should explore PL learning

outcomes across these settings and evaluate the relationship between high-impact PL experience and the type of sponsoring unit or department. Similarly, approximately 74% of participants in the NSPL reported simultaneous involvement in two or more peer leader roles during their undergraduate experience (Young, 2014), raising questions about how the number of positions held might either contribute to or detract from a high-impact experience. Additional research should also be conducted to determine whether there exists an optimal investment of time or energy for high-impact peer leadership experience. The majority of NSPL respondents reported spending between six and fifteen hours per week in PL activities (Young, 2014). Yet, no research has been conducted to examine how these levels of involvement impact PL learning, or whether a curvilinear effect might be present. Of additional interest is the way in which PL compensation (e.g., hourly wage, scholarship, stipend, no compensation) might impact PL learning. The vast majority of PLs are volunteers, who receive no formal compensation. Future studies should explore differences in PL learning across various compensation models.

Finally, this dissertation has only explored environmental factors that contribute to transformative learning within the PM experience. As discussed previously, PMs' interpersonal characteristics are equally important in determining the extent to which being a PM leads to transformative learning. Future research should explore how individual characteristics influence transformative experience, as well as how processes of recruitment and selection can be more thoughtfully designed to identify those students who are most likely to experience transformative learning through their involvement as peer leaders. For example, Terrion and Leonard have proposed a taxonomy of characteristics of peer mentors in higher education (2007). Future research could be conducted to examine how individual characteristics identified in this taxonomy correlate with transformative learning outcomes and high-impact experience for those

who serve as peer mentors. Additionally, Terrion and Leonard have proposed a set of pre-requisites for peer mentor applicants (i.e., university experience, academic achievement, gender, and prior experience with peer mentoring), but no studies have been conducted to validate the utility of using these characteristics to inform recruitment and selection. Further, little is known about how these characteristics might influence the impact of training and other developmental experiences upon PMs.

In sum, tremendous opportunity exists for research that further explores peer leadership as an emerging high-impact practice. Likewise, the nascent framework of guidelines for facilitating high-impact PM experience that is presented here should be the subject of a variety of studies to both validate independent elements of the framework, as well as to examine how peer leader development based upon the general principles of the framework varies across various settings and populations.

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