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A Model for Peer Mentor Learning: Designing for Skill-acquisition among Undergraduate Peer Mentors

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ABSTRACT

A Model for Peer Mentor Learning: Designing for

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This design report details the development of a summer training experience for peer mentors in the Freshman Mentoring program at Brigham Young University. The purpose of the project was to develop an extended training program which would assist peer mentors in developing core mentoring skills necessary for their work with first-year students. The design of the training was informed by a number of theoretical frameworks including experiential learning, reflective practice, and narrative design. The training was evaluated using a post-then survey instrument as well as analysis of qualitative data collected from learners throughout the training. Analyses of these data suggested that peer mentors increased both their mentoring skill and confidence in providing mentoring to first-year students. This document also reports on the practical, design, and theoretical insights which emerged from the project as well as their implications for other designers who face similar design challenges. Finally, a brief discussion of the way in which the project has influenced the professional development of the designer is included.

Keywords: experiential learning, reflective practice, mentoring, skill-acquisition, identity development

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Introduction

This design report details the development of a summer training experience for peer mentors (PMs) in the Freshman Mentoring program at Brigham Young University. Accordingly, this document includes (a) a detailed description of the final design for the training, (b) a narrative history of the design process, (c) a discussion of the key design decisions made during the project and the rationale guiding those decisions, and (d) a report on the learning and understanding accumulated by the designer during the course of the project. The sections that follow include a discussion of how and why the project originated, a description of the design process and literature which influenced the design, a detailed description of the final product, and an explication of how theoretical principles were applied to the design. Although this document attempts to provide a description of the design and its key elements, it is intended to extend beyond a simple reporting of the project undertaken by the author. Rather, it is hoped that this report can describe the experience of the designer in ways that illuminate what was learned during the design process, and draw attention to new insights, key findings, and important questions which may be of use to other designers in their work.

Project Origination

This project was conducted in collaboration with the Freshman Mentoring (FM) program at Brigham Young University (BYU). In response to a need for more focused skill development among peer mentors, the author of this report (who is also a full-time administrator in FM) was invited by the Program Director to redesign the summer peer mentor (PM) training model to better prepare PMs for their work with freshmen during the subsequent fall semester.

Project Sponsor/Client

In May of 2010, BYU expanded its Freshman Academy program to provide each freshman enrolling at BYU with access to an upperclassman PM. As stated on the program website, FM "is a key part of a university-wide initiative to strengthen undergraduate education at BYU" and PMs are said to "encourage and support, share and model habits of academic success, and guide students to important campus resources" (2011). Freshman Mentoring employs nearly 100 upperclassmen PMs who mentor and support approximately 6,000 freshmen during their first year at BYU. Peer Mentors are typically responsible for providing mentoring support to approximately 60 new freshmen during fall and winter semesters.

This project originated as a result of FM administrators' desire to provide summer training that would more effectively develop basic mentoring skills in PMs, particularly novice PMs who are participating in the summer FM program. Although PM development remains a focus during the fall and winter semesters, summer term is an optimal time to conduct focused PM training because most PMs are mentoring small cohorts of students (approximately 25 – 30), and enrolled in light course loads or have no academic course work at all.

The author of this report, and primary designer for the proposed project, is a full-time administrator in FM and has been previously involved in the development and implementation of PM training. While the author was primarily responsible for the conceptualization, development, implementation, and evaluation of the training, the director of FM, Dr. Pat Esplin, was heavily involved in the initial development of the product as well as decisions regarding evaluation of the training. Additionally, Dr. Stefinee Pinnegar, a faculty member from the Department of Teacher Education at BYU and frequent collaborator in the development of PM training, assisted in conceptualization of the design and development of assessment materials. Finally, a small

number of veteran PMs (i.e. those with 2+ years of experience) participated with the author in an initial task analysis of the PM role and helped manage various day-to-day aspects of the training.

Evidence of Need

In the past, FM has provided basic training to PMs during the summer term in an attempt to prepare them for their more intensive work with freshmen during the fall semester. This training has included readings, asynchronous online discussions, and periodic written reflections. Through informal analysis conducted during the year previous to the project, it became apparent that the summer training model in use—although effective in deepening PMs' conceptual understanding—could do more to support PMs in developing competence in basic mentoring skills. In observing PMs during the course of their fall 2010 mentoring experience, FM administrators found that mentors understood philosophical principles of mentoring and had a basic understanding of what their objectives should be as PMs. However, PMs frequently reported a lack of confidence in their ability to engage with students in intentional, focused ways that were likely to lead to positive outcomes.

Also contributing to the need for redesigned summer training were the programmatic changes to FM described in the preceding section. Under the new FM program, PMs are assigned to more students than in the past, but still work the same number of hours (approximately 15 – 20 hours each week). Additionally, other changes in the way FM courses are structured resulted in decreased time for face-to-face interactions between mentors and students (e.g. PMs attend class with freshmen less frequently and participate in fewer co-curricular activities with them than in past years). Accordingly, PMs in FM are now faced with the challenge of using brief encounters and infrequent interactions to build relationships with students and engage with them in productive ways. Consequently, the PM role now requires

PMs who are more confident, proactive, and skilled, particularly in initiating productive academic conversations with freshmen students.

In response to the challenges described above, the author piloted isolated skill-development modules during the fall 2010 and winter 2011 semesters and found that PMs seemed to both appreciate and benefit from time spent practicing mentoring skills and receiving feedback on their performance. Based on anecdotal evidence gained in biweekly interviews with PMs and observations during these skill development sessions, it appeared that these training activities both increased PMs confidence in their ability to engage in mentoring dialogue with freshmen, and improved their skill in doing so. Thus, it seemed that more strategic and intentional instruction in skill development would be an appropriate strategy for addressing these challenges.

While the current project originated, in part, as a response to the challenges described above, it was also a means of capitalizing on the unique opportunity presented by the summer term to engage PMs in more intensive skill development and to refine a model for promoting PM skill acquisition. In addition to having more time to engage in developmental activities during the summer term, PMs' experiences with new summer students provide opportunities for the application of learned skills, reception of meaningful feedback, and reflection on practice, all of which help to promote deeper and more authentic learning (Bransford, Brown, & Cocking, 2000). Additionally, because most PMs are not enrolled as full-time students during this time period, they are well-positioned to focus more closely upon their personal development and preparation.

As has been described above, mentoring is a sophisticated practice requiring PMs to integrate basic theoretical understanding, interpersonal skills, and procedural knowledge.

Consequently, there is a need for training that facilitates this type of complex learning and which prepares mentors to engage in highly skilled performances (van Merriënboer & Kirschner, 2007). Accordingly, this project was an attempt to develop an integrated PM training experience and to provide a model that could be readily applied to PM development beyond the summer term.

Project Setting and Constraints

Freshman Mentoring granted the author approximately 15 – 20 hours per week from May through August to design and implement the proposed training. Although PMs' participation in the training was initially limited to the eight weeks of the BYU summer term, two additional weeks of training exercises were added to the design when, in mid-July, it became apparent that eight weeks would not be sufficient to meet the learning goals outlined by the designer and FM administrators. Sufficient student wage monies were allocated to allow PMs to participate in training activities for approximately 1 hour each week (approximately $3,500). In addition to the 45 – 50 participating PMs, a small number of veteran PMs (approximately five to six) were made available for 5 – 10 hours each week to assist in the design, delivery, and evaluation of the training. Full-time FM staff and administrators were also notified that they should expect to occasionally participate in delivery of training, although it was made clear that the author would have primary responsibility for this aspect of the project.

Because of limited physical space in the FM offices, it was important that the final design provide flexibility for PMs to engage in the majority of the learning tasks and collaborative activities at a time of their choosing and in a variety of locations. Nonetheless, the PM work room (including its nine desktop computer terminals) in the FM office suite (2014 Jesse Knight Building) was accessible on a limited basis for PMs to complete portions of the training (e.g. computer work, simple role-plays with partners, etc.). Traditional classroom space was also

scheduled through the BYU Campus Scheduling Office for use in weekly large-group training meetings led by the author and the director of FM. Initially, it was decided that no additional equipment or facilities beyond what is currently available through the FM department would be necessary.

While many of the design decisions were made during development, FM administration did ask from the outset that the final design meet a small number of pre-determined specifications. The client's expectations for the project were that the final product (a) engage both new and returning PMs in a meaningful learning experience, (b) connect in a cohesive way with the training that came before and after summer development, and (c) provide multiple opportunities for PMs to practice mentoring skills and reflect on their performance. These constraints did not appear to be problematic; consequently, no further negotiation was necessary. All remaining design decisions were made during the course of development and negotiated with Dr. Esplin and other FM administrators as needed.

Preliminary Analyses

The sections that follow provide descriptions of the target population (i.e. undergraduate students employed as PMs in the FM program), a more in-depth discussion of the training models and resources currently in use in FM, a brief discussion of the state of PM development on other campuses, and a description of the formal task analysis that was conducted to better understand the PM role and how training could improve PM performance.

Target population. The target population for the instruction was the 2011 summer term cohort of PMs (approximately 35 PMs; 35% male, 65% female). These PMs are undergraduate students at BYU, ranging from sophomore to senior class standing, who have met minimum academic requirements (e.g. minimum GPA of 3.4 and completion of core first-year curricular

requirements) and successfully completed the PM application process. This process requires that PMs submit three letters of recommendation (general character reference, academic reference, and ecclesiastical endorsement) and complete a comprehensive online application, including a series of written essay questions intended to reveal applicants' attitudes toward issues such as the mission of BYU, lifelong learning, overcoming obstacles, and establishing relationships. Applicants who advance through the initial screening process are then interviewed by a selection committee consisting of two FM administrators and a veteran PM.

Because of this rigorous selection process, those selected to be PMs are excellent students with high levels of past academic achievement. And, because completion of core first-year coursework (e.g. American Heritage and First-Year Writing) is a requirement for selection, PMs tend to be experienced upperclassmen with a good understanding of the type of academic effort and work necessary for success at BYU. While this positions PMs to serve as academic models for their freshmen protégés, it is not uncommon for PMs to struggle to relate to freshmen who are not like them—for example, those who do not enter BYU with the same high level of preparedness or commitment to education. Accordingly, there was opportunity for and anticipated benefit in providing PMs with training that would better equip them to connect with freshmen from diverse backgrounds and with varying degrees of past academic achievement.

As determined through interviews with PMs, most become interested in the mentor role out of a desire to help and support other students, and to have employment which allows them to "work with people." Frequently, PMs are past participants in the program and have pursued positions in FM due to meaningful experiences they had with their own PM. Accordingly, PMs are, on the whole, very motivated and committed to improving the experiences of freshmen at BYU. As a result, they tend to be quite receptive to training which they perceive to be beneficial

in preparing them to achieve their objectives of supporting freshmen students. Thus, the training developed during the course of the project was intended to be highly practical, supporting PMs in making meaningful connections between what was being learned and its alignment with their purposes as PMs.

Not surprisingly, prior experience with mentoring varies across PM cohorts. As mentioned above, many PMs have participated in FM (or the previous Freshman Academy program) as freshmen prior to their work as mentors. And, most bring protégé experience gained from past interactions with mentor-like figures such as teachers, coaches, and youth leaders. However, the vast majority have never served formally as mentors or been engaged in academic mentoring relationships where emphasis was placed upon academic wellbeing or the development of intellectual skills. Consequently, while PMs generally possess strong interpersonal skills, they frequently struggle to transfer these skills to unfamiliar mentoring contexts, a challenge also observed in a variety of other learning environments (e.g. Bransford et al., 2000; Carraher, 1986; Lave, 1988).

Based on the above characteristics, there appeared to be an opportunity for PMs to benefit from training which would improve their ability to act on altruistic desires to assist new BYU students, help PMs develop and apply interpersonal skills in mentoring relationships, and provide a model for the type of academic mentoring espoused by the FM program. These learner characteristics guided the project throughout the development and delivery of the training.

Current training analysis. Peer mentors in FM participate in a wide range of training and development activities across the entire academic year. Soon after hiring decisions are finalized late in the winter semester, PMs attend an introductory training session where they are introduced to the values and ideals of FM, and made aware of the expectations that FM has of

them. This training is largely intended to orient PMs to their new role and to help them feel a part of the FM community. During the spring term, PMs receive training relative to the policies, procedures, and practices of the FM office environment (e.g. dress code, protocol for greeting visitors and answering phones, BYU registration policies, etc.). Because BYU admits only a very small number of new freshmen for the spring term, PMs' work during this time is generally clerical and administrative in nature. While they are typically asked to do reading to familiarize them with the mission of BYU and the purposes of the FM program, their interactions with freshmen are limited to occasional phone and email dialogue.

As indicated above, the summer training provided to PMs in prior years had been primarily theoretical in nature and was intended to deepen conceptual understanding of the purposes of mentoring at BYU, principles of effective teaching and learning, and the Aims of a BYU Education. This largely occurred through the completion of reading assignments, participation in online discussions with other PMs, and the completion of written reflections. Occasionally, this training invited PMs to participate in simple learning activities with a skill-based component (e.g. engage in a conversation with another young adult and ask them to tell you about themselves, then write a reflection evaluating how well you listened). However, these were generally infrequent and isolated activities, disconnected from authentic mentoring interactions, and that were likely viewed by PMs as secondary to the other aspects of the training described above. Further, because these activities were not consistent or sustained components of the summer training, they appeared to have had only minimal impact upon mentors' skill development.

Two weeks prior to the fall semester, PMs participate in an intensive week-long training workshop where they receive more focused preparation for their fall semester work. An analysis

of past fall training materials revealed, again, that relatively little attention had been given to PM skill development. This was due, in part, to time constraints and the urgency of conveying a large amount of material (e.g. details of their work assignment, information regarding campus resources and freshman course policies, and assignments related to PMs' involvement in New Student Orientation activities) to PMs in a relatively short amount of time.

Peer mentor training continues on a limited basis throughout the fall and winter semesters and occurs largely through required one-hour departmental meetings, attended on a weekly basis by PMs and FM staff. Although these meetings are intended to serve as supplemental training for PMs, there is very little time for the practicing, refining, or evaluating of PMs' skills. Indeed, these meetings frequently become dominated by departmental announcements, review of university policies, and discussions of challenges or problems that have arisen during the previous week. While all important activities, they tend to involve PMs in largely passive ways and do not provide opportunities for the performance of authentic mentoring practices or behaviors.

The findings described in the above analysis held several implications for the design of the final summer training model. First, because PMs participate in other training activities both prior to and following the summer term, the redesigned summer training model was viewed as a potential bridge, a means of building upon PMs' prior learning and connecting in meaningful ways with the learning that would follow. Accordingly, the designer based development of the training materials upon the assumption that PM training is best viewed as a narrative process, wherein the various training components should be sequenced and connected to tell a cohesive story (Parrish, 2007). By considering PM development as a narrative, it was hoped that the resulting design would be more engaging for PMs and to support them in integrating their

learning across their varied training experiences (McDonald, 2009; Schank, 2005). Second, because of limited opportunity to do so during other times of the year, the initial design placed heavy emphasis on the development of mentoring skills through modeling, focused practice, and opportunities to receive feedback on performance (Ericsson, Krampe, & Tesch-Römer 1993). Finally, by incorporating self-directed learning tasks and other activities that could be completed outside of structured meeting times, the design was seen as a means of providing a flexible model for delivering training at other points in the academic year.

Existing peer mentor training models. While peer mentoring initiatives have become relatively commonplace in higher education (Jacobi, 1991; Johnson, 2002; Tinto, 1998) and some literature has described the characteristics and practices associated with successful peer mentoring programs (Sanft, Jensen, & McMurray, E, 2008; Terrion & Leonard, 2007), very little work has been done exploring the development of mentoring skills among undergraduate PMs. PM programs exist on numerous campuses, both nationally and internationally, and it is not uncommon for individual programs to post training materials through their university websites (e.g. California State University-Northridge, Iowa State University, Indiana University); however, these training resources are often designed to meet the specific needs of a particular campus and, most often, do not provide enough context or theoretical grounding that they can be easily adapted for use on other campuses.

Additionally, BYU's FM program is unique due to both its scale—it employs a much larger number of PMs than virtually any other program in the country—and the fact that its PMs are paid an hourly wage for up to 20 hours of work each week. More commonly, PM programs are implemented to provide mentoring for narrow segments of the student population (e.g. first-

generation college students, students of color, or student-athletes) and are made up of volunteer PMs who engage in mentoring activities for just a few hours each week.

An initial review of existing PM training resources failed to identify any comprehensive training models that could be implemented at BYU. Consequently, FM administration requested that an in-house training model, based on best practices in instructional design, skill-acquisition, and first-year initiatives, be the focus for the project.

The peer mentor role. To add precision and focus to the development of summer PM training, an initial task analysis was performed to identify and inventory the performance requirements for PMs in the FM program. It was anticipated that this process would yield a richer description of the PM role and provide direction in developing training modules that would be aligned with the actual behaviors and functions performed by PMs. This analysis identified the behaviors, attributes, and ways of being that were seen as critical for PMs to develop and adopt. These characteristics then served as the foundation upon which the final design of the training was based. The performance requirements identified through this analysis were then used to develop the performance goals which are described in the Design Goals and Criteria section that follows. The paragraphs that follow describe the process involved in analyzing the peer mentor role.

The analysis of the peer mentor role conducted for the project included a number of sub-processes, carried out somewhat simultaneously and which all contributed to the final analysis document included in Appendix A for this report. In accordance with Gibbons' recommendations to identify real-world performance requirements (2008), the initial phase of the task analysis consisted of the writing of short "mentoring vignettes" which describe typical interactions between PMs and freshmen students (e.g. an interaction at New Student Orientation,

a brief conversation following class, a walk-in visit in the FM office space). These vignettes were intended to provide authentic examples of mentoring performances in a variety of common settings, which could then be analyzed to document critical mentoring skills, attitudes, and actions. An example of one of these vignettes can be found in Appendix B.

Following the creation of the aforementioned vignettes, a simple coding process was conducted involving the author, selected FM administrators (including the program director), and a small number of veteran PMs. Participants in this phase of the analysis were invited to read their assigned vignette and highlight or code any instance where the PM in the vignette demonstrated knowledge, skill, or a desirable mentoring attitude. Coded vignettes were returned to the author, who then conducted a second-level analysis involving the identification and documentation of commonly coded behaviors, understandings, and skills.

Terrion and Leonard's taxonomy of peer mentor characteristics (2007) was then used to refine and organize the initial list of PM skills and behaviors developed through the process described above. This taxonomy identifies ten characteristics of effective peer mentors which were then used as a basis for grouping the attributes, behaviors, and skills identified through analysis of the mentoring vignettes. These eventual task groupings included (a) communication skills, (b) supportiveness, (c) trustworthiness, (d) relationship-building, (e) empathy, (f) enthusiasm, and (g) flexibility.

While it was agreed upon among FM administration that each of the seven task areas were important to attend to in the course of PM development, the relatively short amount of time available for summer PM development necessitated that the training be focused on a narrow range of the PM performance spectrum. Over 35% of the studies reviewed by Terrion and Leonard identified communication skills as one of the most important components of mentoring

relationships. Additionally, a 2003 study of mentee perceptions of the most desirable mentor characteristics found that mentees valued communication skills as much as nearly any other attribute (Mee-Lee & Bush). Consequently, it was ultimately decided that the summer term training would be focused on developing fundamental communication skills among participating PMs.

Design Goals and Criteria

Based on conversations with the client and the analyses described in the above sections, a number of design goals were agreed upon at the outset of the project. First, because of the academic calendar and need for PMs to be prepared to begin their work in the fall semester, it was imperative that the training be completed within the 10 week period prior to the beginning of the BYU fall semester (i.e. mid-June to late August). This goal was met and PM training ended on August 24th, approximately t10 weeks after it commenced. Additionally, FM administration requested that PMs be involved in training activities for no more than two hours per week. Although no formal data were gathered to determine the actual amount of time PMs spent completing training exercises, informal surveys of participants indicated that the workload was manageable.

Other design goals included the need for the design to provide sufficient flexibility to allow PMs to complete training exercises and learning tasks outside of formal meetings and at a relatively self-directed pace. Although the training was ultimately segmented into one to two week modules, each with their own deadlines, the final design provided PMs with freedom in determining when and where to complete training tasks so long as they met the deadlines for each module. For example, very few tasks required PMs to be present in the FM offices or to have any equipment beyond a computer with an internet connection.

In accordance with the training needs cited in the Project Origination section and the requirements of the PM role identified in the task analysis reported on above, it was proposed that the training equip PMs with basic competence in fundamental mentoring skills prior to their intensive work with freshmen during the fall semester. Through subsequent consultation with the client, particularly Dr. Esplin and Dr. Pinnegar, it was decided that the training focus specifically on the core communication skills of (a) noticing and observing, (b) listening, (c) asking questions, and (d) initiating conversations. While the practice of peer mentoring consists of a variety of other skills not included in this list, these four skill areas were seen by both the client and the author as integral aspects of successful peer mentoring practice. Additionally, it was decided at the outset that the training place an early emphasis on reflective practices and that reflective exercises be embedded throughout the training model in an attempt to equip PMs with tools to more effectively evaluate, direct, and integrate their learning across the training experience (Moon, 1999).

Because the training was conceptualized to focus on the acquisition of specified skills, it was initially thought that performance-based assessment would be the most appropriate means of evaluating PMs' learning (Stiggins, 1997; Wiggins, 1989; Wiggins & McTighe, 1998). It was anticipated that skill-specific rubrics would be developed by FM administration to describe multiple levels of competence for each of the skill areas being emphasized (i.e. noticing and observing, listening, asking questions, and initiating conversations). However, rather than relying upon rubrics to evaluate PM learning, the eventual design made use of simple checklists which described baseline performance for each of the aforementioned skills. These checklists were designed to outline step-by-step guidelines for successful performance of the specified skills and served both an evaluative and pedagogical function. Simple checklists like those

described here have been found to improve performance of basic recurrent skills (Lund & Kirk, 2002; Meilinger, 2004) as well as more complex cognitive skills, including those that require high levels of analytical reasoning and problem-solving (Berenholtz et al., 2004; Gawande, 2009).

Formal assessment of PM skill development was originally planned to take place through traditional pre- and post-assessments where PMs were to participate in brief simulated mentoring scenarios, with veteran PMs playing the role of freshmen protégés. It was anticipated that veteran PMs would use skill rubrics to evaluate each PM's ability in initiating conversations, listening, and asking questions. However, due to time and resource constraints a retrospective pre-test or "post-then" approach to evaluation was adopted. The features of this evaluation method, as well as a detailed rationale for this change in approach are discussed in the design and development process narrative which follows later in the report. Additionally, formal assessment results detailing the accomplishment of the performance goals described above are reported on in the Results section at the conclusion of this report.

The initial design for the training also called for formative assessment to take place across the eight weeks of summer term and described periodic self- and peer-assessments of competence in the specified skill areas, as well as biweekly written reflections in which PMs would articulate new understandings, successes and challenges in applying learned skills, and confidence levels in interacting with the freshmen they were mentoring. While some slight variations from these initial plans are evident in the final design described later on in the document, the original goal of embedding formative assessment throughout the learning experience has been deemed to have been met by both the author and FM administration.

As stated above, another goal of the summer training was to increase PMs' confidence in interacting with freshmen students. Accordingly, initial plans were made to measure changes in PMs' confidence levels across the summer term using traditional pre- and post-assessments that would incorporate simple Likert scale items. Similar to the change in method described above, these changes were evaluated using a post-then survey format. Additionally, it was determined that PMs would provide qualitative descriptions of their confidence levels in the biweekly reflective assignments described above and that these measures would be used as additional evidence in determining how well the training achieves its stated objective to increase PMs' confidence and comfort in interacting with freshmen students. It was also hoped that this qualitative data could be used to analyze and explore the relationship between PMs' skill levels and their self-reported confidence in the mentoring role. Based on assessment data gathered at the conclusion of the training experience, this goal of increasing PM confidence was met. These data are also reported on in the Results section of the report.

Artifact Category

While the initial design proposal included plans for the development of various products (e.g. rubrics, checklists, collections of training materials) and was to rely, in part, upon a multi-user system (e.g. the BrainHoney account used by FM, or regular training meetings), it was assumed from the very beginning of the process that the fundamental artifact being designed was best described by Krippendorf's concept of a discourse (2006). According to Krippendorf (2006), discourses are "organized ways of talking, writing, and acting" (p. 11). Further, the proposed design met many of the other characteristics Krippendorf uses to describe a discourse including (a) the creation of textual matter; (b) the existence of a community of practice which renews and sustains a focused dialogue surrounding pertinent artifacts and practices; and (c) the

presence of a set of recurrent and expected practices that constitute the craft of the community (Krippendorf, 2006). Indeed, the proposed mentoring discourse was intended to lead to the creation of a social system that would produce a variety of artifacts—including textual material, philosophical ideas, and skilled practices--that would then move the community of PMs forward and allow it to remain viable.

Over the course of the project, it became increasingly evident that, indeed, it was a discourse—a particular way of thinking, conversing, and interacting—that was being designed. Now that the project is nearing its completion, it is clear that the final design has incorporated additional characteristics of Krippendorf's conceptualization of a discourse, most notably the need to balance solidarity and generativity by allowing the incorporation of new or modified practices while still preserving established and time-tested patterns of behavior (2006). For example, while the training was intended to facilitate improvements in PMs ability to ask effective questions in their interactions with freshmen, PMs invariably developed new and modified questions in response to the students to whom they had been assigned and then shared them with each other.

Across the course of the design process, it also became apparent that the mentoring discourse being facilitated should be rearticulable in that PMs be provided with opportunities to understand, dialogue about, and practice the evolving forms of their discourse. This rearticulation occurred as PMs discussed their work in weekly training meetings, engaged in focused practice of selected mentoring skills, and wrote reflectively about their experiences. Through their engagement in these elements of the discourse, PMs developed their identities as members of the FM community by both deepening their understanding of the practice of

mentoring and developing increased competence in performing the practices of their mentoring community (Lave, 1991; Wenger, 1998).

Design Process Elements

The design process carried out during project was shaped by the training goals outlined by the client. Although the basic structure of the design was based upon a single instructional design model, a variety of other literatures informed aspects of the design. The subsections that follow provide (a) a rationale for the design approach used in structuring the design; (b) a review of additional literature which influenced the design, including a theoretical rationale for the pedagogical strategies that were employed in the training; and (c) a narrative of the design and development processes as they unfolded across the project.

Design and Development Rationale

Peer mentoring is a complex performance that requires mentors to skillfully apply understanding of both teaching and learning principles and student development theory to their interactions with freshmen. Consequently, the summer PM training was intended to promote complex learning that would integrate mentors' knowledge, skills, and attitudes, and facilitate meaningful transfer from the learning environment to the performance environment (van Merriënboer & Kirschner, 2007). Training was designed and developed based on van Merriënboer's four-component instructional design (4CID) model and employed a holistic design approach (2007).

The 4CID approach was adopted to prevent the fragmentation and compartmentalization that commonly result when learners are being trained to engage in complex performances like mentoring. Because mentoring is a skill requiring PMs to coordinate the performance of a variety of interrelated sub-skills, it was important that the final design provide learning

opportunities that simplified complex mentoring tasks, while still allowing PMs to engage in meaningful and authentic mentoring practices. The four components of van Merriënboer and Kirschner's model—(a) learning tasks, (b) supportive information, (c) procedural information, and (d) part-task practice—provided a systematic approach to designing instruction that met these criteria.

The first component of the design involved the creation and sequencing of learning tasks. Learning tasks grew out of the task analysis described previously in this report and were intended to support learners in integrating knowledge, skills, and attitudes (van Merriënboer & Kirschner, 2007). Additionally, tasks were sequenced from low to high difficulty in a way that supported PMs in developing the constituent skills (i.e. noticing and observing, listening, and asking questions) necessary to eventually engage in the whole task of initiating and sustaining meaningful mentoring conversations. Following this design approach, learning tasks included skill-building assignments that PMs would complete during a given two-week period. For example, to increase competency in noticing and observing, PMs were initially given an assignment to observe one of their assigned freshmen and to make notes of their observation. A later task required PMs to apply the basic skill of noticing and observing, but to also take a more active approach by asking strategic questions that would allow them to build rapport with a particular student. Learning tasks such as these involved PMs in whole and authentic mentoring tasks (i.e. engaging in conversations, building relationships, and observing students in academic settings), but always emphasized a single constituent skill such as listening or asking questions. This whole-task sequencing was adopted to attend to developmental processes in learning and to help PMs develop a vision of the entire skill of mentoring early in the learning process. This complete picture then served as a guide for learners as they integrated knowledge, sub-skills, and

attitudes into a coordinated and cohesive performance (Perry, 2008; van Merriënboer & Kirschner, 2007).

The second and third components in the 4CID model pertain to information that can assist learners in performing various aspects of learning tasks. Supportive information assists the learner in developing cognitive strategies and mental models for performing non-recurrent aspects of a particular practice (e.g. solving novel or unique problems that are not normally encountered). Procedural information consists of detailed or step-by-step instructions for performing recurrent or routine learning tasks (van Merriënboer & Kirschner, 2007). In the training model developed during the course of the project, supportive information included readings exploring principles underlying the performance of particular constituent skills (e.g. an article on anthropological practices to assist PMs in determining how to effectively observe students in academic settings) or models designed to deepen PMs conceptual understanding (e.g. a visual model illustrating the elements of meaningful reflective questions). Procedural information was then provided in the form of checklists similar to those described in the Design Goals and Criteria section of this report. These checklists were used to specify individual steps or considerations in the performance of routine tasks.

The fourth component of the 4CID model is the inclusion of part-task practice items. These practice items are highly repetitive and help learners develop competence and automaticity in performing routine aspects of a task (van Merriënboer & Kirschner, 2007). Peer mentors participated in part-task practice activities on a regular basis with their peers in the FM office setting. These tasks generally took place in the PM work room (known to PMs as the "glass room") and consisted of a short list of routine tasks listed on a white board located at the front of the room (e.g. "Use 'open-ended' questions to invite another PM to tell you what they have

learned this summer about being a peer mentor"). Peer mentors were instructed to find a partner and to repeat these tasks a specified number of times prior to their work each day.

The four interrelated components described above were used to develop a comprehensive training blueprint for the summer term as well as individual training modules focused on each of the core communication skills identified previously in this report. In sum, this approach was aimed at addressing the problems of compartmentalization, fragmentation, and insufficient transfer described by van Merriënboer and Kirschner (2007) by facilitating integrated learning and engaging PMs in the performance of authentic tasks. While the four components of this model are often used as the basis for a highly-structured or rigid approach to designing instruction (i.e. one in which the designer progresses through explicit design steps in a prescribed sequence), the present design adopted a more dynamic "zigzag" approach in which iterations, skipping of some design steps, and movement between components was common (van Merriënboer & Kirschner, 2007).

Literature Relevant to the Proposed Design

For this project, it was important that the training being developed attend to best practices in the field of undergraduate peer mentoring. Consequently, a review of peer mentoring literature was conducted in order to identify features of effective mentoring programs and the ways in which PMs can be trained to leverage these features. Additionally, the design of instruction was grounded in three theoretical landscapes. Jennifer Moon's work on reflective learning (1999, 2004) provided a foundation for developing reflective writing assignments designed to assist PMs in connecting the various training exercises (e.g. readings, learning tasks, and practice exercises) and integrating their learning across these experiences. Finally, literature

exploring the impact of self-efficacy and self-theory on learner motivation helped the final design attend to issues of learner motivation.

Peer Mentoring. Recent research in higher education has identified key features of learning environments that promote meaningful student learning. The use of PMs is a practice that integrates a number of these features in an effort to support deeper and more transformative student learning. Indeed, optimal learning environments are student-centered, facilitating students' active engagement in the learning process. They also consider cognitive factors by encouraging students to connect new knowledge with prior experience and by promoting metacognition. Consequently, reflection and formative assessment are integral aspects of these learning environments (Biggs, 2003; Entwistle, 2000; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2007; Halpern & Hakel, 2003; Light, 2001; Pascarella & Terenzini, 1991; Smith, MacGregor, Matthews, & Gabelnick, 2004). Peer mentor programs create such environments and help deepen learning by providing opportunities for collaboration, the development of a sense of community and shared purpose among learners, and helping students consider diverse perspectives (Topping, 1996).

As first-year initiatives move to the forefront of undergraduate reform (Smith, et al., 2004), the mentoring component of these programs deserves careful attention. Over the past few decades, the effectiveness of mentoring has been studied in a number of contexts, including the professional and educational domains. Most of this work has focused on expert-novice mentoring relationships; however, first-year experience (FYE) programs more commonly use a mentoring approach wherein a slightly more experienced student mentors one or more new students. And, because PMs are often only one component of a more complex FYE program (e.g. Evenbeck & Williams, 1998), focused research on these types of programs is limited.

Our experience indicates that PM programs contribute to the creation of environments that support meaningful learning for both mentors and protégés. And, while the literature on the effects of mentoring on those who are mentored is growing (Eby & Lockwood, 2005; Noe, Greenberger & Wang, 2002; Topping, 1996), the literature on the learning of mentors themselves is sparse.

Reflective learning. Reflective learning has long been used as a means of reinforcing learning and as a tool in facilitating professional development (Moon, 1999; Schön, 1983). Because one of the primary purposes of reflection in learning is to promote intentionality and skilled action (Moon, 1999), it provided a useful theoretical framework for supporting the learning of PMs, particularly as it related to the development of mentoring skills and the application of these skills in intentional ways. Further, as has been outlined earlier in this report, the training was aimed at facilitating complex learning that would be holistic, integrated, and transferrable to authentic performance settings (van Merriënboer & Kirschner, 2007). Reflective learning activities have been identified as vehicles for facilitating this type of meaning-rich, purposeful, and connected learning (Entwistle, 1997; Moon, 1999; Tagg, 2003). Additionally, much of PMs' learning in this training experience was intended to be experiential in nature (i.e. participation in authentic learning tasks), and reflection has been shown to be an integral aspect of the experiential learning cycle first described by Kolb (1984). Finally, reflective learning is associated with increased levels of impact and effectiveness for short training courses and focused workshops (Moon, 2004). Thus, reflection appeared to be an attractive and useful pedagogical tool, given that the proposed FM summer training was initially limited to eight short weeks.

Skill-acquisition. Traditionally, instructional design models have fragmented instruction by deconstructing skilled performances into a series of individual performance objectives or collection of sub-skills. Independent instructional events are then designed to assist learners in achieving these isolated objectives. In this approach, it is not until the end of instruction that the learner performs the entire skill (van Merriënboer & Kirschner, 2007). As discussed previously, this practice can lead to challenges when the goal of instruction is to facilitate the learning of complex skills or coordinated performances. Holistic design approaches attempt to solve this instructional problem by presenting learners with whole models designed to help them envision what a skilled performance looks like (Achtenhagen, 2001). Additionally, this practice of modeling has been shown to assist novice performers in developing the metacognitive ability necessary to evaluate their own performance to determine how it falls short of more skilled performances (Kruger & Dunning, 1999). For the proposed training, modeling of effective mentoring was provided through the mentoring vignettes described in previous sections and both live and recorded modeling of mentoring dialogue by FM administrators and veteran PMs.

Deliberate or "deep" practice also plays an important role in the development of skill (Coyle, 2009; Ericsson et al., 1993). Deliberate practice is characterized by a focus on specific performance goals, a high number of repetitions, specific feedback based on pre-determined performance criteria, and high levels of metacognition or reflection on performance (Colvin, 2008). Ultimately, engagement in this type of practice results in deep understanding of a skill and the development of *adaptive expertise*, enabling learners to respond to external task demands in flexible and wise ways (Bransford et al., 2000; Schwartz & Sharpe, 2010). By designing instruction based on the 4CID model, the training developed during the project provided PMs with opportunities to engage in this type of focused practice.

Self-efficacy, self theories, and learner motivation. Engagement in challenging learning tasks is closely related to learners' level of motivation. For complex learning tasks like those included in this training, motivation was deemed to be particularly important, due to the high levels of investment, effort, and deliberate practice required of PMs across the summer. In these types of settings, learners' goals, effort, and persistence are highly correlated with the degree to which they possess self efficacy (Bandura, 1997). Quite simply, self-efficacy is a measure of an individual's beliefs about their ability to successfully complete challenging tasks. Consequently, learners with high levels of self-efficacy are more likely to engage in difficult learning tasks, tolerate perceived failure, and work towards the accomplishment of challenging goals. Contrastingly, low levels of self-efficacy are often associated with low tolerance for struggle, early withdrawal from challenging learning environments, and high levels of discouragement when learning new skills. Additionally, attention to self-efficacy as part of the training of interpersonal skills has been shown to contribute to skill maintenance (Gist, Stevens, & Bavetta, 1991).

Similarly, work by Carol Dweck has suggested that learners' *self-theories*, or beliefs about their own or others' abilities, have a significant influence upon the degree to which they achieve the desired outcomes for a particular learning experience (Dweck, 2000). Individuals with a "fixed mindset," believe that qualities such as intelligence or skill are unchangeable. Consequently, they often fail to engage fully in learning tasks or training opportunities, out of a belief that expending effort in these activities will lead to only small gains. Contrastingly, individuals with what Dweck terms a *growth mindset* believe that ability can be improved through sustained and focused effort and are much more likely to invest in the learning opportunities provided through training programs (Dweck, 2006). Not surprisingly, these

individuals meet and achieve the desired learning objectives for a course, program, or experience, at a much higher rate.

Because the proposed PM training model was based on the assumption that PM skill can improve through focused practice and feedback, it was critical that PMs adopt a "growth mindset" at the outset and come to believe that their engagement in the training activities would lead to meaningful improvements in their performance. Additionally, because the training was designed to provide PMs with frequent opportunities to receive feedback on their performance and engage in self-evaluation, it was important that they be prepared to respond to shortcomings and mistakes in productive ways that would further their learning rather than producing feelings of failure or discouragement. Consequently, the first training module of the summer consisted of readings and exercises designed to help PMs develop a growth mindset and increased levels of self-efficacy. This week-long introductory module was relatively simple in nature; however, it was considered to be an important aspect of the training experience because of its potential to frame PMs training experience as an opportunity or quest for growth and learning (Parrish, 2007). Additionally, past studies have demonstrated that this type of introductory instruction can lead to increased confidence to successfully perform learned skills among novice learners (Martocchio, 1994; Robins & Pals, 2002).

Original Design Timeline

While an initial review of literature took place in conjunction with the creation of the project prospectus, the original design and development plan called for a continued review of relevant literature, as well as an initial conceptualization of the training, to take place in early May. Development of instructional modules, materials, etc. was then planned for mid-May to mid-June. Although it was anticipated that adaptation to instructional plans and materials would

occur throughout the course of implementation, development was planned to be completed by June 20th when the 2011 BYU summer term began. Implementation and gathering of assessment data was scheduled to occur during the eight weeks of summer term (June 20th – August 5th). Finally, it was believed that analysis of the training, including the extent to which it met design goals, would commence in August, followed by a formal written report to be completed during September and October. A more detailed description of the original timeline can be found in Figure 1.

Actual Design and Development Process

Departures from the original design plan were made including modifications to (a) the task analysis, (b) assessment plan, (c) development of instructional materials, and (d) the culmination of the training experience. A narrative description of these events, including rationale for why changes were made, follows in the sections below. A timeline representing the actual design and development process can be found in Figure 2.

Task analysis. Although an informal task analysis was conducted as the project was being conceptualized, in mid-May it became apparent that a more formal task analysis would add precision and focus to the development of summer PM training. As described in the Preliminary Analyses section early in the report, the goal of this analysis was to develop a refined set of performance goals for the design, which could then influence and focus the development of training modules and instructional materials. This analysis was completed in early June and, as expected, played a fundamental role in shaping subsequent design decisions.

Project Phase	*April 24 – May 7*	*May 8 – 21*	*May 22 – June 4*	*June 5 – June 18*	*June 19 – July 2*	*July 3 – 16*	*July 17 – 30*	*July 31 – Aug. 13*	*Aug. 14 – Aug. 27*	*September*	*October*	*November*
Development	X	X	X	X								
Lit Review	X	X										
Training Blueprint	X	X										
Instructional Materials & Assessment Instruments		X	X	X								
Implementation					X	X	X	X				
Reflection & Mindsets					X							
Conversations					X	X						
Listening						X	X					
Asking Q?s							X	X				
Evaluation				X	X	X	X	X				
Pre Assessment				X								
Weekly Reflections					X	X	X	X				
Post Assessment								X				
Analysis									X	X		
Reporting										X	X	X

Figure 1. Proposed design timeline

Project Phase	*April 24 – May 7*	*May 8 – 21*	*May 22 – June 4*	*June 5 – June 18*	*June 19 – July 2*	*July 3 – 16*	*July 17 – 30*	*July 31 – Aug. 13*	*Aug. 14 – Aug. 27*	*September*	*October*	*November*
Development	X	X	X	X	X	X	X	X				
Lit Review	X	X	X	X								
Training Blueprint	X	X	X	X								
Task Analysis			X	X								
Instructional Materials & Assessment Instruments			X	X	X	X	X	X				
Implementation					X	X	X	X	X			
Reflection & Mindsets					X							
Noticing & Observing					X	X						
Listening						X	X					
Asking Q?s							X	X				
Initiating Conversations								X	X			
Evaluation				X	X	X	X	X	X			
Pre Assessment				X	X							
Weekly Reflections					X	X	X	X				
Post Assessment								X	X			
Analysis									X	X		
Reporting										X	X	X

Figure 2. Actual design timeline

Assessment and evaluation plan. The assessment and evaluation plan associated with the training evolved more than nearly any other aspect of the project over the course of the design and development process. And, although the final evaluation materials and methods differed in fundamental ways from those laid out originally, resource constraints and new understanding that emerged during implementation of the training program led the design team (i.e. the author, Dr. Esplin, and Dr. Pinnegar) to believe that a modified approach to evaluation would be advantageous. The prospectus for the project called for a performance-based assessment of peer mentor skill levels both before and after the training program was implemented; however, in early June it became apparent that this approach was likely to require FM administrators and veteran PMs assisting with the project to spend large amounts of time facilitating and then analyzing simulated mentoring conversations with PMs. Because of other work-related responsibilities and the need to begin the training program by June 20th (i.e. the beginning of the BYU summer term), it was determined that this original approach would not be feasible.

As an alternative, it was decided that at the outset of training PMs would participate in abbreviated role play exercises (5 – 10 minutes in length) with veteran PMs playing the role of a freshman student. A role play scenario was written by the author of this report, as well as a "script" for veteran PMs to follow. These experienced PMs were then provided with basic training designed to prepare them to respond to PM behaviors in ways that would illicit the skills of noticing and observing, listening, and asking questions. Additionally, FM administration requested that these role play exercises be recorded and archived to provide opportunities for novice PMs to view and analyze their performance both before and after administration of the summer training.

This unanticipated request necessitated the need to find video analysis software that could capture video footage of these role plays and also allow PMs to annotate and analyze their recordings. Consequently, Mike Johnson from BYU's Center for Teaching and Learning (CTL) was contacted in early June and assisted the author in identifying a video analysis tool that would facilitate the self-analysis requested by FM administration. Ultimately, the author opted to use a web-based video analysis program developed by the CTL called "REACT." Typically this tool is used to record and analyze simulated job interviews among undergraduate business students; however, it was seen as an ideal tool for the current project. Ultimately, it was selected over other alternatives because it was available for FM to use free of charge, would allow PMs to access their video files and conduct their analyses from any location with an internet connection, and was seen by the author as a simple tool that PMs would be able to learn to use and navigate with very little training or experience. Further Mike Johnson agreed to provide support and guidance in using the program, which proved to be invaluable when challenges and problems were encountered in its initial implementation. Recording of these role play exercises took place from June 15 – 22 and PMs conducted their analyses as one of the learning tasks included in the "Noticing and Observing" training module that followed a few weeks later. Additionally, veteran PMs were recorded as they played the PM role and these recordings were used to model effective mentoring performance for novice PMs at the outset of training.

In addition to the changes described above, changes in the data analysis plan occurred in early August. At this point in the project it became apparent that relying upon a traditional pre- and post- training performance-based assessment would be problematic in that there would be little control across the two simulations to be measured and compared (e.g. the conversation a peer mentor has prior to training would likely be very different from the one occurring after

completion of the training, making it difficult to compare pre and post measures). At the outset of the project, it was also anticipated that biweekly quantitative survey data would help to determine the extent to which programmatic outcomes were met; however, when this formative evaluation data was initially analyzed in mid-July, it became apparent that the small sample size of participating peer mentors was likely to lead to non-significant differences across measures. Because these quantitative data were self-reported by novice peer mentors, it was believed they were highly susceptible to the *unskilled and unaware effect* described by Kruger and Dunning (1999), wherein participants pre-training measures and post-training measures are nearly identical, even though changes in understanding and skill have occurred. In response to these observations and the belief that undetected learning was taking place, an analysis of qualitative data from peer mentors' written reflections was conducted in late July and early August and yielded initial evidence that learning and growth had been occurring across the training experience. Based on these preliminary analyses, it was hypothesized that meaningful learning was occurring, but that it would not be evident in analyses of the quantitative data from the biweekly surveys.

For the reasons described above, a revised plan for evaluating the training program was believed to be better suited for the objectives originally laid out in the prospectus for this project. Consequently a review of literature for alternative approaches was conducted and influenced the design of the approach that is described in the paragraphs that follow.

Frequently, the impact of training programs is measured using a traditional pre-post design; however, this approach assumes that participants have sufficient knowledge, prior to the training, to make accurate self-assessments. A variety of studies have demonstrated that novice performers and learners do not possess sufficient competence to accurately judge their abilities

or performance (Aiken & West, 1990; Deutsch & Collins, 1951; Howard, 1980), and that a *response-shift bias* is likely to occur as the criteria or standards used by participants in making judgments about their own ability are modified as a result of their participation in training programs (Howard, et al., 1979). When the purpose of the training is to increase understanding or facility in the same variable(s) being measured in the pre-test, participants' initial overestimation of their ability may lead to Type II errors, wherein actual treatment effects go undetected when measured at the conclusion of the training experience. In these cases, training programs which improved understanding and skill may be discontinued because no apparent impact has been observed. The initial analysis of biweekly survey data, in conjunction with analysis of written reflections described previously, indicated that this may also be the case for the PM training program designed for this project.

A retrospective pre-test or "post-then" evaluation approach minimizes the effect of response-shift bias by asking participants to look back on themselves prior to training and to reflect on their initial understanding and ability, but with what is hoped will be improved and refined understanding of the skills or ability being measured. This retrospective method has been shown to generate more valid data than traditional pre-post formats (Zwiebel, 1987). And, more recently, evaluators have recommended replacing pre-post designs with the retrospective pre-test as a way of improving program evaluations (e.g. Pelfrey & Pelfrey, 2009).

While a number of retrospective self-assessment survey formats exist, it was decided that the modified evaluation for this project would use a standard post-then format wherein respondents are asked to rate both their post-training and initial abilities. Following the guidelines laid out by Nimon et al. (2011), separate post-test and "then-test" surveys were administered at the conclusion of the training in late August, with the post-test survey

administered first, followed by the "then-test" on the following day. Additionally, because it was anticipated that some respondents may be tempted to view their post-test scores when making retrospective evaluations of their initial ability, the electronic post-test survey was locked to prevent participants from viewing their post-test ratings. The "then-test" was also prefaced with instructions reminding respondents that their "then" ratings need not correspond to any previous ratings they had given.

While comparisons between post-test and then-test scores were believed to be a means of answering the question of whether or not peer mentors increased their competence and confidence, it was also acknowledged that some gains may take place due to time-effects. Consequently, it was decided that evaluation would also include an examination of the qualitative data gathered throughout the project, particularly excerpts from reflective writing assignments. It was believed that this process would yield qualitative data illustrating how the training program (e.g. readings, learning exercises, practice exercises, etc.) supported peer mentors in refining their skills and making new meaning. Results of these assessments are described in the Results section at the conclusion of this report.

Development of instructional materials. When the project was formally approved in May and initial design timelines were being developed, the author believed that all instructional materials would be developed and ready for implementation by June 20th when the BYU summer term began. However, very early in the development process, it was clear that this had been an overly optimistic view. While all the instructional materials used in the training were ultimately prepared and administered on time, out of both necessity and the desire to incorporate formative feedback gathered during the design process, most materials for each training module were developed "on-the-fly" approximately one week before the respective module was to begin.

Typically, development followed a fairly consistent cycle which began with identification of the desired PM behaviors for the particular skill area being emphasized in the training module (e.g. noticing and observing, listening, asking questions). As described in the Design Goals and Criteria section of the report, checklists outlining these desired behaviors were developed to guide evaluation and instruction. These checklists, developed in early June, became the foundation for selecting and developing the instructional materials for each module and specified the behaviors PMs were intended to practice and refine during each module. After clarification of the behavioral goals for each module, the author selected readings, designed learning tasks that would allow PMs to practice the specified skill through authentic interactions with freshmen students enrolled in the summer FM program, developed practice exercises to support the internalization of these skills, and crafted a reflection prompt to assist PMs in integrating their knowledge and skills at the conclusion of the module. While the exact sequence of these tasks varied somewhat across the modules, each was present in a fairly cyclical pattern across the entire design and development process.

In late June, the author attended the International Conference on the First-Year Experience in Manchester, UK. During the conference, the author was introduced to a number of open-access online learning tutorials developed by the University of Manchester, some of which included tutorials focused on interpersonal skills. After a review of these tutorials, two ("Listening" and "Asking Questions") were adopted for use in FM's summer training modules because of their alignment with the objectives for those respective modules and because they were seen as a way of providing greater variety in the learning exercises provided to PMs.

From the outset of the project, it was determined that the training would make use of BrainHoney, the learning system (LMS) already in use by FM. While BrainHoney was not seen

as the most ideal environment for collaborative online learning, it was available for use without any additional cost to FM, was familiar to PMs and staff in the FM program, was provided with technological support by BYU's CTL at no charge to the client, and—most importantly—was web based and would allow PMs flexibility in accessing learning materials from any location with an internet connection. As was planned, BrainHoney became the main technological tool used to post instructions for training modules, house readings and other training resources, and was where PMs posted their biweekly reflections across the course of the summer. BrainHoney also allowed FM staff and supervising PMs to access PM reflections to monitor progress across the summer and to provide occasional formative feedback to PMs on their reflections and the learning they were articulating therein.

Culmination of the training experience. As described briefly in the Project Settings and Constraints section above, two additional weeks were added to the summer PM training program to facilitate the accomplishment of the objectives laid out at the outset of the design. Doing so allowed FM to use the first week of the summer term to orient PMs to the training model, devote two weeks to each of the core communication skills (i.e. noticing and observing, listening, asking questions), and include a final module designed to assist PMs in integrating their learning and reflecting on how they had grown across their summer experience. This module was more abbreviated than previous modules and was made up of only a reflective writing assignment and a second analysis of the role play situations recorded at the beginning of the training experience. For this second analysis, PMs were invited to view their recording again and to compare their post-training skill level with their initial skill level as observed in the recording.

In addition to extending the summer training experience beyond the final week of the summer term, a formal conclusion for the summer training was developed and included as part of FM's Fall PM Training Workshop, held during the two weeks prior to the beginning of the fall 2011 semester. These concluding learning exercises were intended to (a) bridge the gap between summer term and fall semester, (b) serve as a formal conclusion to the training experience where PMs could recognize and celebrate their learning (Parrish, 2007), and (c) provide intensive opportunities for practicing the skills developed during the summer and emphasizing the importance of initiating conversations.

Consequently, the first day of this workshop was devoted to reviewing, reflecting upon, and celebrating the learning PMs had experienced over the course of the summer. Additionally, PMs were invited to make connections between the skills they had developed over the summer and the work they would be doing with freshmen in the coming fall semester. The core learning activity on this day included a small-group collaborative exercise that involved PMs in sharing insights from their concluding reflection, discussing commonalities in their experiences, and exploring new questions that had been raised by their readings and reflective writing across the summer. And, in a mirror-like fashion to the first module of the summer, PMs received a letter from their staff supervisor and coordinating PM which congratulated them on their successful completion of the summer training and formally welcomed them to the fall FM corps of PMs. Each subsequent day of fall training included a 30 – 60 minute training segment where PMs were involved in initiating a particular type of mentoring conversation in a role play situation with another PM (e.g. a first conversation intended to build rapport, a conversation with a student at orientation, or a conversation with a struggling student). Again, these exercises were intended to reinforce the skills PMs developed through participation in the summer modules and were

designed to simulate the sorts of conversations PMs would be expected to have during the first few weeks of the fall semester.

Design Document

The summer training program that resulted from this design project includes six training modules, as well as a set of concluding learning experiences meant to serve as a supplement and culmination to the overall training experience. The training modules have been designed to be administered through a web-based LMS, which can also be used to collect and store artifacts which document and describe the type of learning experienced by participants in the program. While materials can be hosted on an LMS, the vast majority of participation in the training is designed to occur outside of an online environment through face-to-face interactions with others. The sub-sections which follow provide additional details of the design including (a) a more in-depth physical description of the product that resulted; (b) a discussion of the non-physical, structural elements of the design; and (c) a more comprehensive operational description of how these design elements are used during instruction.

Physical Description

The final product which resulted from the design is an extended, multi-week training program for use in developing core skills among undergraduate PMs. Major components of the design include individual training modules, culminating exercises for use at the conclusion of the training, and assessment materials. Each module is focused on developing a specified interpersonal mentoring skill and includes supplemental information, in the form or readings or tutorials; learning tasks which provide learners with opportunities to practice and refine skills in authentic and holistic ways; brief daily or recurrent practice exercises, providing opportunities for further practice of recurrent behaviors; procedural information in the form of behavioral

checklists and models; and reflective writing prompts whose purpose are to integrate and deepen learning. To facilitate an effective culmination to the training a collaborative group exercise was designed, which involves PMs in articulating, sharing, and celebrating the learning they have experienced across the summer training. Finally, assessment exercises and corresponding instruments have been designed to both engage PMs in reflective learning, and to provide quantitative and qualitative data for use in determining whether training goals have been met.

Media elements. A detailed list of the media elements designed and produced for the project can be found in Appendix C.

Packaging. Media elements include materials for learners, instructors, and administrative personnel. While the vast majority of these materials have been designed to be delivered online through a learning management system, a small number of instructor and administrator materials have been produced in hard-copy format and can be compiled and delivered in notebook form.

Learner materials. Most materials seen and used by learners are electronic instructional materials associated with individual modules and delivered online. For each training module, learners are provided with module instructions which (a) outline learning objectives, (b) provide an overview of the activities they will participate in during the module, (c) list readings for the module, and (d) give instructions for the learning tasks that will be completed during the module. These instructions are delivered as an electronic document that can be accessed through the LMS described previously in this report. Additional electronic materials include readings, online tutorials, recorded speeches, and skill checklists, all of which are also accessed through the LMS.

Additional learner materials include paper documents that may be delivered to learners as part of the culminating activities described previously. More specifically, during “Initiating

Conversations" exercises learners are provided with simple handouts which help to organize and direct their learning, while also serving as a helpful job aid they can take with them into their work. For example, the handout for the exercise focused on informal conversations provides a table where learners can record possible phrases for initiating conversations with students. This "tool" can then become a reference that learners can return to as they plan to initiate conversations with freshmen students in the future. During these exercises PMs may also view simple PowerPoint slides which provide basic instructions for conducting practice exercises and mentoring role plays.

Instructor materials. Instructors see and use the learner materials described in the preceding section. Additionally, instructors are provided with a notebook comprised of meeting outlines and presentation guides to assist in facilitating group training meetings; sample letters illustrating the types of letters learners could be provided with at the beginning and end of the training experience; descriptions and instructions for the part-task practice exercises associated with each module; and handouts and presentation slides for use in group meetings.

Administrator materials. Those who administer training see and use the materials described in the previous two sections. Additionally, administrators have primary responsibility for conducting assessment of the training experience. Consequently, administrators are provided with a variety of assessment materials which are compiled into a notebook similar to the instructor materials notebook referenced above. These materials include instructions for conducting and recording mentoring role plays (e.g. instructions for "actors," site preparation checklists, and descriptions of potential scenarios) and a comprehensive description of the summative post-then survey format that can be used to determine whether training goals have been met.

Site requirements and implementation hardware. Because one of the design goals for the training was to develop learning tasks and exercises that learners could participate in outside of formal training meetings, the site requirements for the training are minimal. To access online learning materials like those described in the *Learner materials* section, learners need only a computer with an internet connection, as well as a basic monitor, mouse, and keyboard. Once materials have been accessed, learners may review them from the monitor or print hard copies of the documents displayed and complete the learning tasks in a setting of their own choosing. At the conclusion of each module, learners will, again, require a computer with an internet connection to post any artifacts (i.e. written reflections) produced during the module.

Group meeting rooms or classrooms are required on a weekly basis to facilitate collective experiences for learners, including short lectures, group discussions, collaborative exercises, and role plays. These rooms should have a capacity of 40 – 50 and be located on-campus where they are easily accessible to both learners and instructors. Because the goal of activities in these locations is to facilitate engagement among and between learners, rooms should be equipped with moveable seating which facilitates group work and dialogue. Additionally, group meeting rooms should contain projection and computer equipment which allow instructors to display PowerPoint slides, web content, etc.

A PM work area, in close proximity to the FM office suite, should also be made available to PMs for their participation in daily practice exercises. This work area should have a capacity of 15 – 20 and enable PMs to engage in mentoring role plays, access electronic materials via the internet, and complete peer- and self-evaluation activities. A white board or chalk board should be mounted on one wall and used to outline instructions for these practice exercises.

Additionally, the space should be equipped with writing surfaces (e.g. a few desks or small tables), 15 – 20 chairs, and at least 10 computer terminals where the internet can be accessed.

Finally, a location for recording mentoring role plays should be procured for use at the outset of the training so that learners can participate in recorded mentoring conversations and then view and analyze them as part of the training experience. While a formal recording studio is ideal, any quiet space which can comfortably accommodate three to five individuals would be sufficient. Recording equipment (e.g. a computer with connected web cam) should be available for capturing video footage of the role plays. Additionally, the space should have a high-speed internet connection so that the footage collected has a high play-back quality. While not essential, two small tables, sufficient chairs, and an additional laptop for use by the role play participants may enhance the recording process.

Hardware configuration. Computers used to access learning materials should meet the minimum configuration requirements described briefly in this section. Because the vast majority of materials are accessed through the web, memory size for computers is not critical; however, because learners may occasionally save work to a computer hard drive prior to uploading it in the LMS, a basic memory capacity of 3 GB and hard disk capacity of 250 GB are recommended. Additionally, some learning exercises involve the viewing of video segments; consequently, learners will require access to computers with sufficient graphic and audio capabilities (e.g. 128 MB of video memory and built-in speakers). It is also recommended that computers have at least a 13 inch display and contain USB ports. Finally, because PMs will create and upload artifacts (i.e. written reflections) using computers, it is recommended that any laptops used have at least two hours of battery life to avoid unexpected shutdowns that will result in lost work.

Networking. Basic networking connections are required for learners to access learning materials. Although wireless capability is not a necessity, learners will have greater freedom and flexibility in accessing materials when using computers which are 802.11 b/g compliant. At a minimum, computers used for training purposes should be equipped with a wired internet connection (e.g. 10/100 Ethernet ports).

Structural and Conceptual Description

The summer PM training model designed for this project attempted to achieve alignment across a number of areas including client needs, instructional goals identified by the designer, and the learning activities embedded within the model. As described in the Design Goals and Criteria section early in this document, the prevailing desires of the client were that the training focus on the development of fundamental communication skills and bring participants to a basic level of competence before the fall semester commenced. Based on this request and in response to preliminary analyses conducted at the outset of the design process (i.e. target population, current training, and task analyses) more specific instructional goals were identified. Instructional events were then developed and sequenced to assist learners in progressing from achievement of basic instructional goals (e.g. developing competence in simple mentoring skills such as noticing and observing) to more complex goals (e.g. competence in asking reflective questions), with the training culminating with an intensive focus upon the goal of initiating and sustaining purposeful mentoring conversations. Additionally, instructional events and learning exercises made use of the opportunities for authentic and active learning that were present due to participants' interactions with freshmen enrolled in the Summer FM program. The goal and event structures making up the non-physical elements of the design, including how instructional goals and instructional events have been aligned, are described in the sub-sections which follow.

Goal structures. Each of the instructional goals and sub-goals for the training are listed in Appendix D. As described in the preceding section, the overarching instructional goal for the summer training was to prepare PMs to engage in effective mentoring conversations with freshmen during the fall semester. Consequently, each of the sub-goals listed in Appendix D are seen as means of achieving this top-level goal. Three main sub-goals were identified as critical in achieving the ultimate aim of the training: (a) facilitate the development of a *growth mindset* (Dweck, 2006); (b) equip PMs with basic communication skills, fundamental to the process of mentoring; and (c) increase PMs confidence and willingness to initiate and sustain conversations with freshmen. Additionally, more granular goals were identified as they related to increasing PM skill level and developing a growth mindset.

For each of the core mentoring skills emphasized in the training (i.e. noticing and observing, listening, asking questions, and initiating conversations), behavioral goals were identified and guided the development of instructional activities (described in the following section). These goals also formed the basis of the skill development checklists that were used during the training (see Development of instructional materials section) and were used in peer and self-evaluation exercises. Consequently, a high degree of granularity can be observed in Appendix D for goals relating to the development of core mentoring skills.

The instructional goals pertaining to the development of a growth mindset were largely metacognitive in nature and were related to the development of particular attitudes among training participants. For example, instructional events early in the training process were designed to help PMs develop increased receptivity to the training by encouraging self-efficacy and beliefs among PMs that their mentoring skill could increase through focused practice and sustained effort. In a related way, the training culminated with an instructional event designed to

celebrate PMs growth during the summer, but also encourage continued growth once the intensive summer training experience had ended.

Event structures. To map instructional goals onto specific instructional events, a modified work model synthesis document was developed (see Appendix E). Because the goal of the training was to facilitate task-accretion, such that participants would practice and develop various sub-skills towards a culminating instructional event designed to integrate these sub-skills into the performance of a complex skill (i.e. initiating mentoring conversations), a task-to-work-model process was employed. The initial task analysis process described previously facilitated the grouping of instructional goals into modular units (e.g. noticing and observing, listening, etc.). The work model synthesis process then aided in creating a graded sequence of instructional events that led learners from simple to more complex learning tasks and prepared them to engage in the ultimate task of initiating conversations. These instructional events took the form of training modules and became the basic unit for constructing a comprehensive training blueprint.

Elements. The summer PM training experience is segmented into six modules, each of which include various readings, learning exercises, practice exercises, and written reflection assignments. While similarities exist across the collection of modules, there are two main types of modules: reflective modules and skill-based modules. The reflective modules include Module #1 (Growth Mindset) and Module #5 (Summer Conclusion). These modules were delivered at the beginning and end of the training experience and were meant both orient PMs to the training process and facilitate reflection on the learning process. As can be observed in the Work Model Synthesis provided in Appendix E, these modules are relatively small in scope and

focus on a small number of instructional goals; consequently, they included only short reading assignments and reflective writing.

The four skill-based modules (#2 – Noticing and Observing, #3 – Listening, #4 – Asking Questions, and Module #6 – Initiating Conversations) are larger in scope than the reflective modules and emphasize the behavioral goals outlined in Appendix D. Each module focuses upon an isolated sub-skill and includes readings on a specified skill, learning tasks which provide learners with opportunities for authentic practice of that skill, daily practice exercises, and a written reflection. Module #6, although focused on the development of mentoring skill, was unique in that its purpose is to integrate the learning that occurs in the first five modules. Accordingly, it omits readings and reflective writing, while giving heavy emphasis to intensive practice of the sub-skills introduced in previous modules as well as feedback on performance.

In addition to the five modules described above, eight weekly instructional sessions were held across the training experience to provide supplemental instruction and to address unanticipated learning needs and client concerns that arose across the training experience. Led by the author and Dr. Esplin, these meetings consisted largely of role play exercises, modeling of mentoring skills, and group discussions. Generally, activities facilitated during these meetings were focused upon the current module; however, some sessions also provided follow-up training and practice for previously learned skills.

Micro-strategy types and use. Each module employs a fairly consistent instructional strategy that involves (a) the completion of theoretical and conceptual readings, (b) participating in learning exercises involving direct interaction with freshmen students, and (c) a concluding written reflection where learners are invited to articulate what they have learned and how their skills have been augmented during the module. Recurrent practice exercises are interspersed

throughout this sequence. Because learners have access to all training materials once a module begins, the possibility exists for learners to complete these tasks out of sequence; however, instructions for each module clearly indicate the desired sequence for completion of the tasks. Additionally, some learning exercises depend upon the completion of prior tasks, which provides some control in determining how learners proceed through the activities for each module. In these cases (i.e. where certain learning exercises must be completed before learners can move on), deadlines can be provided to learners to help them manage completion of sub-exercises and ensure sufficient time remains for completing additional learning exercises for the module.

Weekly instructional sessions are designed to address the needs and concerns identified through formative assessment; consequently, flexibility should be provided in employing a number of instructional strategies. Nevertheless, the instructional sessions which took place during the first implementation of the training generally employed a common instructional strategy which consisted of (a) an orienting discussion where the goals for the session were outlined and clarified; (b) modeling of the mentoring behaviors it was hoped PMs would practice and adopt; (c) a practice session where PMs could participate in role plays, receive feedback on performance, etc.; and (d) a debriefing discussion where best practices were shared and future goals for improvement were identified. Generally, input from learners was sought in determining scenarios and situational factors for the practice exercises (e.g. an international student feeling overwhelmed with the cultural adjustment).

Macro-strategy. Whole-task sequencing is employed to ensure that learners have opportunities to practice the whole skill of engaging in mentoring conversations from the beginning of the training experience (van Merriënboer & Kirschner, 2007). More specifically, the learning tasks and exercises associated with each of the skill-based modules involve PMs in

practicing whole skills (e.g. engaging in conversations with at-risk students, etc.); however, a particular sub-skill is emphasized in each module. Modules are ordered in a simple to complex progression to provide PMs with opportunities to learn, practice, and refine constituent mentoring skills in a developmental sequence, while still maintaining focus on and gradually improving the whole skill of initiating conversations with freshmen students. This macro-level sequencing strategy also facilitates the integration of learning across each of the modules and assists learners in seeing how each instructional event is connected to previous learning as well as the overall instructional goal for the training experience. Naturally, the "Initiating Conversations" module is placed at the conclusion of sequence and serves as the culminating learning experience for participants, providing opportunities for accretion of previously learned skills and reflection upon the overall training experience and the growth that they have observed in themselves.

Because modules are arranged to follow a pre-determined developmental sequence, each learner encounters the modules in the same order and at virtually the same time. In the event that remediation or additional instruction is needed for individual learners, supervisors and training coordinators (e.g. FM administration and supervising PMs) meet with learners to offer individualized instruction, guidance, and mentoring. When more large-scale remediation is required, the weekly instructional sessions described in the previous section are employed to provide additional support to the entire group of learners.

Style and tone. Learners should perceive instruction as an opportunity to both refine their mentoring skills and experience meaningful personal growth as it relates to interpersonal abilities and general communication skills. While the context for the training is the FM program and the stated goal is to improve PMs mentoring skills, effort should be made to help learners see

how these skills are transferrable to other contexts where they engage with others in conversations (e.g. future employment, personal relationships, service opportunities, etc.). The weekly instructional sessions included in the design, as well as individual sessions with supervisors, provide opportunities for PMs to reflect on how the learning they acquire through their training might be applied outside the PM role.

Additionally, the overall training experience should be viewed by learners as highly practical, with clear connections between training tasks and the actual tasks performed by PMs in their day-to-day work. To create this style and tone, the learning exercises for each of the skill-based modules have been designed in a way that requires PMs to complete the tasks as they interact with freshmen students. Doing so helps learning exercises to be viewed as authentic, active, and experiential in nature. Also contributing to the pragmatism of the training is the concluding module emphasizing the skill of initiating conversations. This module is sequenced so as to come immediately before PMs begin their fall semester work, which involves them in an almost constant attempt to meet their assigned protégés and to engage them in academic conversations. By concluding training with a high volume of practical exercises where PMs engage in simulated mentoring conversations, it is anticipated that PMs will see the value of the training experience and begin the fall semester with increased confidence in their ability to interact with the freshmen students whom they will mentor.

Finally, although many of the learning activities included in each module are completed by learners on an individual basis, the training should be viewed as somewhat collaborative and social in nature. The reflective modules described in the *Elements* section have been designed to help learners see themselves as participating together in a journey during which they can assist each other in their personal growth. Additionally, the opening fall training session involved PMs

in sharing their learning and growth and celebrating their collective accomplishments at the conclusion of the summer training experience. The large group instructional sessions and daily practice exercises are also designed to provide opportunities for collaborative learning, which should contribute to the social nature of the training.

Operational Description

The following sub-sections provide a detailed description of how the physical elements described in the Physical Description section above are used during the instructional process. This includes a description of the social environment in which instruction takes place, a narrative description of a typical instructional experience from the perspective of a learner, information regarding learner controls, a description of the management system employed, and a discussion of the assessment plan used in the training.

Modes of use. The training functions in three main modes: self-instructional, instructor-led, and collaborative. The vast majority of the training operates in self-instructional mode as learners complete tasks associated with each training module (e.g. readings, learning exercises, reflective writing, etc.) independent of instructors and peers. Instructor-led components of the training include group discussions which take place during weekly instructional sessions. Although a relatively small component of the overall training experience, learners do operate in a collaborative mode as they complete daily practice exercises and participate in role play activities and small group discussions included in weekly instructional sessions.

Social environment. As indicated in various parts of the report, learners largely work independent of one another as they complete training activities. However, although completing assigned readings and participating in reflective writing are individual activities, PMs do participate in a great deal of social interaction through participation in learning exercises because

these tasks require PMs to interact with the freshmen they mentor. And, while formal learning groups are not included in the design, learners have additional opportunities to engage with others in the learning process through practice exercises and weekly instructional sessions.

Use scenario. The subsections which follow provide a description of each of the operating modes listed in the Modes of Use section above. This part of the report is intended to provide detail regarding typical instructional encounters from the perspective of the user.

Self-instructional. In the self-instructional operational mode, learners engage in largely self-directed learning activities. At the beginning of each instructional module, learners receive an email notification from a training administrator which provides a basic overview for the module, including any pertinent deadlines, and prompts the learner to visit the LMS to access more detailed instructions and any learning materials that have been made available for the module. When learners are ready to begin the module, they log in to the LMS using a standard authentication process (i.e. username and password). Learners access learning materials by, first, opening the "Summer Training" folder and then opening the appropriate sub-folder for the particular module they wish to complete. Learning materials (e.g. instructions for the module, readings, checklists, etc.) can then be selected for display on the learner's computer monitor or printed for later reference. Once the learner has reviewed instructions for the module, they are free to complete the instructional activities at a self-directed pace, but are expected to meet the deadlines outlined in the module instructions. To complete learning tasks, learners are required to engage in a variety of interactions with the freshmen students they have been assigned to mentor, as well as peers and supervisors. Additionally, learners create various learning artifacts which direct, focus, and articulate their learning. These artifacts generally consist of written reflections, but may also include observational notes, planning documents, and self-evaluations.

To complete participation in a module, learners log in to the LMS (as previously described) and upload any artifacts that have been created during the course of their participation. These artifacts may be uploaded as word or PDF files or entered into standard text editors provided through the LMS. The LMS also provides learners with continued access to materials and artifacts from previously completed modules.

Instructor-led. During instructor-led operational modes, learners take a slightly more passive role because of the need for the delivery of small segments of instruction by program administrators and staff supervisors. In this mode, learners will typically find themselves seated in a classroom-style setting (but with moveable chairs and tables which facilitate collaboration, rather than traditional desks) and are likely to listen to brief overview remarks and orienting instruction from an administrator. These remarks provide the learner with an understanding of the goals of the session and the learning exercises they should anticipate participating in during the meeting.

Frequently, the purpose of these meetings is to provide opportunities for skill-development. In these cases, learners view a live modeled performance of the skill(s) being trained. Learners are also occasionally invited to participate in these modeling activities or to provide commentary relating to observations of the model or thoughts about alternative approaches, not demonstrated or made visible by the model. Following their observation of a model, learners then practice the same skill(s) in role play activities with a partner or other simulations which provide opportunities for focused skill development. Learners are provided with sufficient practice time to engage in multiple practice trials and from the perspective of both PM and student. Following this practice session, learners are reconvened and participate in a

debriefing discussion where best practices are shared, difficult practice cases are unpacked, and additional questions are raised and addressed.

Collaborative. Collaborative mode activities include daily practice exercises completed by learners as they participate together in pairs. To complete these exercises, learners first enter the PM workroom (or another similar collaborative space) and view instructions for the exercises posted on a whiteboard or similar display tool. Some practice exercises involve the use of simple evaluation tools (e.g. checklists and self/peer evaluation forms), which are provided for learners in stacks beneath or nearby the whiteboard. Learners then pair themselves and complete the task(s) outlined on the whiteboard and complete any evaluation forms provided. The role play activities and small group discussions which are common elements of the weekly instructional sessions developed as part of the training also involve learners in a collaborative operational mode.

Learner and instructor roles and responsibilities. Because the training is largely self-directed, learners bear significant responsibility for initiating, sustaining, and monitoring their learning in the self-directed and collaborative operational modes. Accordingly, learners are expected to access learning materials soon after they are made available in the LMS, read all module instructions carefully, and to complete all instructional events by the posted deadlines. Learners are also responsible for creating learning artifacts described in module instructions and to upload them to the LMS by the posted deadline for review by program administrators. Finally, learners are expected to take a deep and holistic approach to their learning by making meaningful connections between past and current learning, seeking out opportunities to apply learned skills in their mentoring work, to ask questions which will promote further learning, and

to engage in regular reflection and self-evaluation of their progress towards instructional goals (Tagg, 2002).

During instructor-led operational modes, learners take on a more passive role and are responsible to listen carefully to the instruction provided in meetings, participate fully in group discussions, and engage in practice exercises according to the guidelines provided by the instructor.

In contrast to role played by learners during self-directed and collaborative operational modes, instructors play an indirect and supporting role under these conditions. In fact, although this report frequently uses the term "instructor" so as to be in alignment with guidelines for creating design documentation, the term is, in some ways, a misnomer. Rather, instructors play a facilitative role by structuring learning opportunities for learners (e.g. modules, practice sessions, etc.) and then allowing learners to direct their learning within pre-determined constraints (e.g. deadlines, situational descriptions for role plays, etc.). During these operational modes, instructors' responsibilities consist of answering learners' questions about the training process or training content, leading group discussions, monitoring learner progress, and providing any needed remediation. Additionally, instructors support learners in applying learned skills and conceptual knowledge in their mentoring work and promote reflective learning by engaging PMs in conversations which assist them in articulating learning, making connections across concepts, and evaluating their growth. As has been described previously, instructors take on a much more formal and directive role in instructor-led modes, particularly the beginnings and endings of weekly instructional sessions.

Learner control. While learners are not provided with the ability to determine the sequence of instructional events, which learning tasks to complete, or how to demonstrate their

learning (i.e. all learners complete written reflections and upload them to the LMS), there are a variety of other choices which are deliberately allocated to the learner during the course of instruction. First, although learners are required to complete readings for each module, they are given freedom to select readings from a list of potential articles, book chapters, etc. For example, in the "Asking Questions" module, learners are required to complete at least two readings; however, they may select from among five possible texts. This design ensures that readings are focused upon the desired instructional goals, while still providing learners with the ability to select those readings which are of most interest to them.

In a similar way, learners are provided with a number of reflection prompts to which they may respond at the conclusion of each module. All prompts are aligned with the objectives of the module; however, they provide PMs with a variety of ways to demonstrate their learning and to articulate new understandings. Further, learners are instructed that they may choose to address a prompt of their own, so long as it is clearly connected to the instructional goals for the module and integrates their learning across all training exercises for the module (e.g. readings, learning tasks, etc.).

Additional choices are provided to learners in determining how to complete learning exercises. Specifically, learners are given freedom to determine which students to interact with as they practice and apply learned skills for each module. For example, a learning exercise may direct PMs to engage in a reflective conversation with a freshman student; however, they determine which students to interact with based on who would benefit most from the conversation, while still providing the PM with an opportunity to practice and apply the skill of asking reflective questions. Similarly, although each module emphasizes a particular high-level skill area (i.e. noticing and observing, listening, asking questions), learners determine which

behaviors they are most interested in developing or refining (e.g. listening more than they talk, noticing non-verbal cues, asking open-ended questions) and then use the learning exercises to focus on these self-selected areas.

Management. BrainHoney, a computerized learning management system, was used to manage learning materials and monitor learners' progress through the various instructional events. While capable of performing quite sophisticated management functions (e.g. grading, standards-alignment, mastery tracking, etc.), the training largely uses BrainHoney to organize learning materials into folders specific to each module and to display materials to learners. Additionally, the *dropbox* feature available through BrainHoney is used by learners to upload any artifacts created during the training, which also facilitates the archiving of these artifacts for future reference, data analysis, etc. BrainHoney's "Gradebook" is used to provide progress reports to instructors and administrators, to facilitate identification of those learners who fail to complete learning tasks and to provide formative feedback to learners on their performance.

Though the LMS is equipped with a continuous enrollment mode which facilitates a self-paced movement through instruction, the first implementation of the training reported on for this project makes use of the traditional management feature, which allows administrators to set enforceable due dates and pre-determined instructional schedules. This was seen as desirable for the current project due to the time constraints outlined for completion of the training. Consequently, learners progressed through the instruction at a pace decided upon by the client and designer (i.e. approximately two weeks per module) and as materials were posted and made available to learners.

Navigation and sequence rules. In consultation with the client, a single path for moving through the major instructional events (i.e. modules) was determined at the outset of the training.

This instructional sequence was followed by all PMs participating in the training. Within modules, no formal control is exerted to ensure that PMs complete learning tasks in a particular sequence; however, module instructions outline a desired sequence and learners are encouraged to follow this path as they complete various learning tasks. Additional detail regarding movement into, between, within, and out of instructional events is provided in the sub-sections which follow.

Movement between events. Completion deadlines are provided for each module; consequently, these dates serve as the formal conclusion for each training module. Informally, a learner's participation in a module ends once they have posted their written reflection (and any other learning artifacts created during the module) to the LMS. The beginning of a new module is signaled by an email announcement which is sent by program administrators to all participants. This email provides a brief overview of the new module, announces completion deadlines, and refers learners to the LMS for more detailed instructions and access to the learning materials necessary for completing the module. New modules are introduced in the pre-determined sequence outlined previously in this document. Training facilitators consult progress reports between each module to monitor learners' completion of training tasks and identify any participants who have failed to complete the module. When individual learners have failed to complete the module by the deadline, facilitators provide reminders and encouragement to complete any remaining tasks as soon as possible. Additionally, they may provide remediation for learners who have demonstrated low levels of competence; however, this remediation is likely to take place during the subsequent module.

Movement within events. Each module consists of a pre-determined sequence of sub-events including readings, learning exercises, and a concluding written reflection. Learners also

participate in recurrent practice exercises during each module; however, they are not part of the above instructional sequence and occur throughout the module. A recommended sequence for completion of these sub-events is provided to learners in the module instructions. Although no formal attempt is made by the training facilitators or the LMS to ensure that learners complete tasks in this sequence, learners are likely to quickly recognize that in order to sufficiently address reflection prompts, they must have previously completed the other tasks in the module (i.e. readings and learning exercises).

Entering and exiting events. No formal rules for entering and exiting events exist. Because the vast majority of the learning is self-directed, learners are permitted to enter and exit the LMS at will throughout the training process. Additionally, materials from previous modules are accessible to learners even after subsequent modules have commenced. This functionality provides the opportunity for learners to continually revisit past content and allows instructors to refer to previous modules when providing remediation to individual learners. As described previously, progress through the modules is not competency-based; rather, learners progress through modules according to a pre-determined schedule. When deficiencies are observed, learners are expected to begin the next module; however, remediation on previous content is provided. Due to the fact that most learning tasks are completed outside of the LMS, there is no need for bookmarking or momentary status capture by the LMS.

Assessment. The assessment plan for the training consists of both formal and informal assessment. Formal assessments include a recorded mentoring simulation that takes place in the first week of the training program, reflective writing assessments that provide learners with opportunities to articulate new conceptual understandings as well as improvements in mentoring skills, and biweekly surveys where learners report on their self-perceived confidence and skill

levels. Informal assessments are integrated with instruction and include observations of role play and simulation activities during weekly instructional sessions, as well as reports made to program administrators in biweekly accountability interviews.

No formal scoring of assessments occurs and learners are not rewarded or penalized based on assessment results. Rather, because one of the goals of the instruction is to assist learners in developing habits of regular reflection and self-evaluation, assessments have been designed to provide meaningful feedback to learners regarding their progress and to promote the development of metacognitive abilities. Additionally, program administrators and training facilitators can use assessment data to monitor the ongoing impact of the training and to identify content areas where increased focus may be necessary. The sub-sections which follow provide additional detail regarding the assessment plan for the training including levels of assessment, types of assessment instruments, assessment procedures, data recording and reporting, and data security.

Levels. Tests are largely informal in nature and, rather than being used as gates or advancement instruments, serve to monitor progress and provide feedback to both instructors and learners. A small number of pre-training assessments take place during the first weeks of the training experience and include a recorded mentoring simulation which learners can then analyze using video analysis tools, and a reflective survey to assist learners in identifying areas for improvement during their participation in the training.

Mentoring simulations involve learners in a role played mentoring conversation with a trained facilitator taking on the role of a freshman student. These simulations or role plays take place in a studio-like setting such that the performance can be recorded and archived using a simple webcam-laptop set up. In addition to the “actor” described above, an additional facilitator

is present to monitor recording. Following this exercise, learners view their recorded performance and provide evaluative commentary using the video analysis tool described in the Assessment and evaluation plan section. Although, no formal decisions are made based upon the data gathered through this assessment, observing learners' performance and analyzing their comments provides program administrators with valuable information regarding individual learners who may require remediation and additional instructional support. Further, after viewing their pre-training performances, learners are likely to be more aware of deficiencies and more receptive to training which follows.

In addition to these simulations, learners complete a simple pre-training survey which invites them to quantitatively self-evaluate their current skill level and level of confidence in interacting with freshmen students. This survey is administered using an electronic survey distribution tool (e.g. Qualtrics) and is delivered to learners via email. Although not the case in the first implementation of this training, program administrators could use results of this survey to modify the instructional modules which follow. However, they should be cognizant of the possibility for learners to overestimate their initial abilities.

Subsequent reflections take place during the course of instruction and are integrated into each instructional module. At the conclusion of each module, learners complete a written assessment (i.e. reflection) which involves providing a response to a written reflection prompt and then posting the reflection to the LMS being used to manage and administer the training. Reflections are not scored; rather, completion or non-completion of the assessment is recorded by the LMS. Training facilitators read learner reflections regularly to monitor progress, identify gaps in understanding, and may also use the LMS to provide feedback and commentary to the learner in response to their written reflection. Additionally, simple self-evaluation surveys

similar to the pre-assessment survey described above are administered at the conclusion of each module. Again, learners' advancement through the training modules is not influenced by these assessments; they serve a monitorial function and provide formative assessment data to both learners and administrators.

Informal assessment of learners' progress and skill level is also designed to take place as program administrators observe learner performance during weekly instructional sessions. The role play and simulation exercises which take place during these sessions allow administrators to observe the performance of individual PMs, to provide occasional feedback, and to identify those learners who would benefit from remediation and additional support. Similar observations can be made in any accountability or supervisory interviews that take place between PMs and supervisors.

Instruments. The performance-based pre-assessment described previously relies primarily upon the web-based video analysis tool (i.e. REACT) described previously. Once a role play has been recorded into the tool (using a webcam-equipped laptop), learners then use the analysis features available in REACT to tag and label short segments of their performance. Additionally, the learner provides brief explanatory commentary regarding why they have tagged each segment. This commentary is entered using a basic text-editor feature provided through REACT. Instructions for completing this assessment are delivered to learners as part of the comprehensive instructions for "Module #2: Noticing and Observing." Instructions for those facilitating the simulation are also provided (see Appendix C).

Written assessment instruments consist of basic writing prompts, designed to elicit reflective writing which articulates learners emerging understanding, makes connections across training concepts and emphases, identifies gaps in learning or new questions, and describes

changes in the performance of mentoring skills. Prompts also direct learners to additional resources which can assist them in their writing (e.g. a model for written reflection, skill-development checklists) and provide basic guidelines for writing quality reflections.

Reflective survey instruments consist of a number of survey items which invite learners to evaluate both their overall mentoring skill level, as well as their level of skill as it relates to specific sub-skills (e.g. asking questions and listening). Most items require the learner to select a response from a five to seven point Likert scale. Additionally, a small number of open-response text entry items are used to assist learners in reflecting on the rationale for their Likert scale responses. Examples of these items can be found in Appendix C. As described in the previous section, these surveys are administered electronically and survey data is collected and stored within an electronic survey account provided through Qualtrics.

Procedures. The performance-based assessment described previously is administered by training facilitators (generally veteran peer mentors with supervisory responsibilities in the program) and takes place in a comfortable setting which facilitates the recording of a simulated mentoring conversation. Two facilitators are present for each test, with one playing the role of a freshman student (i.e. the "actor") and the other monitoring the recording process (i.e. the "recorder"). The recorder is provided with a web cam-equipped laptop computer and is positioned so as to capture a full-screen image of the role play performance. A second laptop is provided for use in the role play in the event that the learner opts to use it during their simulated conversation (e.g. to access campus resources or answer a question asked by the actor). The actor is also provided with a basic script they may refer to during the course of the role play. Learners complete the assessment individually and only a single learner is permitted to be present at a time. Prior to beginning each assessment, the facilitators use the "Site Preparation

Checklist" (see Appendix C) to ensure that the space is prepared for the next assessment. Once the site is prepared, the learner is invited to enter and is briefly oriented to the assessment (e.g. told how long the assessment will last, provided with a brief description of the role play scenario, invited to ask questions, etc.). After the learner has been oriented and has logged into the REACT system, the facilitator operating the recording equipment signals for the assessment to begin and the role play commences. Each assessment lasts approximately five to ten minutes. When the role play has concluded, the learner is thanked for their participation and invited to leave. The facilitators then prepare the site for the next assessment.

The procedure for administering written assessments is significantly less formal than the process for the pre-assessment described above. Written assessments are administered through the LMS, where learners can access the reflection prompt for the given assessment. Learners are permitted to draft their responses to the prompts outside of the LMS (e.g. in Microsoft Word, etc.) and may consult any outside sources that might supplement their thinking (e.g. readings, web resources, checklists, etc.); however, they are instructed to ensure that their reflection incorporates the elements outlined in the Freshman Mentoring Reflection Model introduced during the first training module. Additionally, learners are permitted to discuss reflections with other peer mentors or supervisors as they consider how they might respond. Once the prompt has been written and the learner considers it complete, they log into the LMS and place it in the appropriate "dropbox."

Reflective surveys are administered by program administrators and are delivered to learners electronically at the end of each module (approximately every two weeks). Learners receive a link to the electronic survey in the body of the email and then have one week to complete the survey before the link becomes inactive. Learners are free to begin the survey, save

their responses, and return to complete the survey at a later time, so long as they complete the survey before the link becomes inactive.

Data recording. All data generated from the tests described previously are recorded electronically. For written assessments, data regarding completion of the assessment is recorded in the LMS, including the date and time of submission. The text of the written reflections is also archived and available for program administrators to access. The qualitative data generated through the pre-assessment described previously (i.e. recorded role play footage and accompanying self-evaluative commentary) is recorded by the video analysis tool (i.e. REACT) and available for review by both program administrators and supervising peer mentors who assist in administering the pre-assessment. Reflective survey data are recorded by the survey software and can be accessed by the survey creator and anyone else provided with the access credentials (i.e. username and password). Tests are considered to have been successfully completed when learners have submitted the required artifact or data and have done so by the posted deadline.

The data described here are used primarily in post-test decision making. Based on test data, program administrators (a) make decisions about which learners may benefit from remediation and (b) identify content areas where additional group-level instruction or practice (e.g. in a weekly instructional session) would be of benefit. Data are not used to guide the course of tests already in progress or to influence the order of the major instructional events comprising the training.

Data reporting (assessment-related). The primary stakeholders for the reporting of data are the program administrators and training facilitators. For the first implementation of this training, the author received all data reports and shared pertinent data with program administrators to inform them of overall levels of learner performance and progress towards the

instructional objectives outlined earlier in this report. Consequently, the progress reports generated by the LMS and available to program administrators are invaluable. These reports detail participation rates among learners and indicate completion or non-completion of written assessments. Although these reports can be generated at any point in the training process, they are most critical at the conclusion of each training module to allow administrators and staff supervisors to identify those learners who have not completed required training tasks. Staff may then use these reports to follow up with and encourage individual learners who have fallen behind.

Similar reports are made available to administrators detailing the completion of reflective surveys among learners. Additionally, the reports contain aggregate data for the entire training cohort regarding learners' perception of their overall mentoring skill, skill in specific sub-areas, and their confidence level in interacting with freshmen students. These reports are provided approximately every two weeks across the training experience to provide insight into how learners' self-perceptions of skill and confidence levels change across the duration of their participation in the training.

Data reporting (non-assessment). Observational data, collected through the biweekly accountability interviews is recorded by individual supervisors. No formal reporting of this data is made; however, when observations suggest that an individual learner is suffering from acute anxiety, low motivation, or extreme skill-deficiency, reports may be made to the program director or other administrators who are positioned to provide additional support and/or instruction. Observational data may also assist in the identification of high performing learners who may be asked to provide support and assistance to low performers or to model effective mentoring skills in weekly instructional sessions.

Attendance data at weekly instructional sessions is also collected and used to identify those learners who are absent and who have missed valuable instruction or practice experience. Attendance reports are provided to staff supervisors and training facilitators to enable follow-up and remediation when necessary.

Test and data security. Because the training described in this document is largely self-directed and focused on growth, as opposed to quantifiable achievement, "cheating" among learners is highly unlikely. Consequently, security for tests is minimal and learners are permitted to complete tests (i.e. written assessments and reflective surveys) independent of any proctoring or supervision. While supervision does take place during the pre-assessment, rather than contributing to increased security, its purpose is to facilitate the role play exercise and ensure recording equipment is functioning properly.

Data security is ensured by storing all formal assessment data electronically in a password-protected system (i.e. LMS, REACT, Qualtrics, etc.). Only program administrators and training facilitators are granted access to this data. Additionally, when student facilitators graduate or are terminated from their position in the program, their access rights are revoked. Consequently, only those administrators and facilitators currently associated with the training program are granted access to assessment data.

Design Documentation

The author maintained a design log across the entire design, development, and implementation process. Log entries were made by hand in a simple pocket-sized notebook and documented (a) the work that was completed on a particular day, (b) key decisions made (including rationale for the decisions), and (c) goals for the next day's work. Some entries also documented new questions that emerged or challenges that had been encountered. These

questions and challenges were then used in creating agendas for meetings with the committee chair supervising the project as well as the FM program director. Consequently, this nearly daily documentation was an integral aspect of virtually every step in the design process. Additionally, the author consulted this design log heavily in providing the formal design process narrative which appears early in this report.

The task analysis portion of the design process resulted in both mentoring vignettes and a formal task analysis document. The mentoring vignettes were created in an attempt to visualize and describe the peer mentoring role and the functions carried out by peer mentors in the FM program. Accordingly, vignettes provided descriptions of a variety of typical mentoring scenarios (e.g. first meeting between a student and a mentor, formal interview between a mentor and student, etc.). These vignettes were then analyzed and eventually contributed to the formal task analysis document which appears in Appendix A of this report. This task analysis document provided a comprehensive description of the PM role, including fundamental behaviors and attributes of competent PMs. Consequently, it was instrumental in the writing of the instructional goals which appear in Appendix D, as well as the work model synthesis (see Appendix E) which was created to map instructional goals onto specific instructional events.

Design Rationale

For this project, the process of designing instruction was viewed as one requiring the development of solutions to a number of separate but interrelated design problems. Consequently, the design was seen as being composed of a variety of layers or domains (Gibbons & Rogers, 2009). The sub-sections below describe each of these design layers and discuss how abstract design ideas and theoretical principles informed design decisions in each functional domain. Ultimately, the objective of this portion of the report is to provide a theoretical

rationale for the decisions made in each design layer (e.g. content, control, messaging, etc.) and to make connections between the prominent features of the design and those theoretical principles which influenced them.

Content Plan

Three main types of content are associated with the PM training described in this report: (a) core mentoring principles and concepts, (b) explicit mentoring behaviors, and (c) attitudes towards learning and growth. The instructional events which make up the training are, then, designed to augment learners' understanding in each of these content areas.

Although the ultimate objective of the training is to improve core mentoring skills among learners, it is also necessary that learners develop an understanding of the basic mentoring principles and philosophies which give rise to explicit mentoring behaviors. Consequently, cognitive bodies of knowledge relating to the practice of peer mentoring are represented to learners through readings and occasional lectures. For example, in "Module #3: Listening" learners are presented with content which introduces the practice of reflective listening and provides a rationale for its use in mentoring relationships. Similarly, "Module #4: Asking Questions" delivers content related to the concept of self-authorship (Baxter Magolda & King, 2008), which provides rationale to learners regarding the types of questions emphasized in this portion of the training. Mentoring principles are not focused on in depth, so as to provide ample time for learners to apply mentoring principles and practice explicit skills; however, sufficient content is provided to assist learners in developing a conceptual knowledge base, from which intentional and skilled mentoring performance can arise.

A significant portion of the content associated with the training relates to the explicit mentoring behaviors the training is intended to develop and refine. This body of knowledge is

behavioral in nature and uses checklists and self-evaluative instruments to represent various actions or performances which are associated with effective mentoring or "skilled" mentoring performance. For instance, the module focusing on the skill of noticing and observing provides learners with a list of verbal cues to observe for (e.g. emotion, inflections, colloquialisms), while the listening module outlines elements of "whole-body listening" (e.g. eye contact, posture, facial expressions). This content, though not exhaustive, provides learners with a description of the explicit behaviors and approaches associated with the type of skilled mentoring outlined in the task analysis described previously.

The training also delivers a relatively small amount of metacognitive content, largely in the first module, to orient PMs to the type of learning experience they can expect and to help them see their participation in the training as an opportunity for personal growth. This content introduces the concept of a *growth mindset* (Dweck, 2006) and encourages learners to view their mentoring skills or abilities as capacities which can be improved over time through sustained effort and practice. Additionally, learners are provided with content which illustrates how feedback and reflection can be used as tools for personal growth. Although only a small percentage of the overall scope of the training content, it is critical that this body of knowledge be introduced to learners early in the training experience because of the design's heavy reliance upon practice, feedback, authentic experience, and reflection.

Analysis and capture. Content analysis was performed by the author, in collaboration with Dr. Esplin. Because of their extensive involvement in the FM program and ongoing research in the field of peer mentoring, both were viewed to be subject matter experts (SMEs) and were positioned to both identify and create content used in the training. This process was rather informal in nature and began at the outset of the project with an initial review and analysis

of pre-existing content. At this stage in the analysis, SMEs used the instructional goals outlined in Appendix D to identify a broad list of content areas which could be represented to learners during the training. These content areas then became the basis for forming each of the modules which made up the overall blueprint for the training (i.e. growth, noticing & observing, listening, asking questions, and initiating conversations).

Once the overall design of the training had been clarified and emphases for each of the instructional modules had been decided upon, a more formal analysis process was used to identify the specific content which would be delivered in each module. This content was collected and organized in stages and took place one to two weeks prior to the beginning of each module. Typically, this process involved two steps. First, the initial content list was consulted to determine whether pre-existing content forms could be used in the instruction. This involved the identification of textual content representations (e.g. book chapters and articles) that could serve as readings for the module, as well as a search for graphic and diagrammatic representations (e.g. conceptual models) which could be used to deliver cognitive content to learners. Because the cognitive and conceptual content needs of the training were basic, the readings and models identified through this process were considered adequate to equip PMs with a sufficient conceptual understanding for each of the modules. In a few instances, the content identified in the initial search was deemed inadequate and a subsequent search of available literature was performed. This process was also adequate in capturing a satisfactory amount of metacognitive content for use in the introductory module focusing on developing a growth mindset.

Because previous FM training had focused little on the development of mentoring skills, it was necessary for content relating to the performance of explicit mentoring behaviors (i.e. checklists) to be created and documented by the SMEs. Doing so allowed SMEs to develop

content which emphasized the specific mentoring behaviors program administrators wanted learners to adopt. This process drew heavily upon the task analysis performed early in the design process and resulted in the creation of the skill-development checklists discussed previously in this document. These checklists were developed by SMEs at the outset of the training and used a list format to represent the explicit behaviors and actions associated with successful performance of each skill introduced during the training (i.e. noticing and observing, listening, asking questions).

Theoretical foundation. As described previously in the Design and Development Rationale section of this report, the author approached design of PM training under the assumption that peer mentoring is a complex performance, requiring learners to integrate cognitive knowledge with explicit mentoring behaviors. Consequently, the basic training model was based upon van Merriënboer and Kirschner's 4CID approach to facilitating complex learning and played a role in guiding the analysis and capture of content. The 4CID approach calls for two main types of content to be provided to learners during instruction: supportive and procedural information. Supportive information assists learners in understanding how to approach novel situations and problems in a particular domain, while procedural information is designed to assist learners in performing recurrent or routine aspects of a particular practice (van Merriënboer & Kirschner, 2007).

This conceptualization guided selection of readings for each of the modules. Specifically, readings were selected based on their ability to provide PMs with the cognitive understanding necessary to engage with freshmen in strategic and intentional ways. This supportive information equipped PMs with mental strategies for applying and modifying the overt skills and behaviors introduced in the training and to do so in flexible ways based on the

needs of a particular situation. And, as suggested by van Merriënboer & Kirschner (2007), this content was made available to learners throughout the training experience, so they could continually refer back to it as they performed and completed learning tasks.

Procedural information was provided to learners in the form of skill-development checklists, which outlined a set of behaviors and actions to be performed in virtually any PM-student interaction. While procedural content could have been provided in a variety of formats or structures, checklists were selected as the most appropriate form because of their simplicity and demonstrated ability to improve the performance of recurrent aspects of a practice (Lund & Kirk, 2002; Meilinger, 2004).

While the 4CID approach is not a cure-all or panacea for addressing the challenges that come when training seeks to facilitate the learning of complex skills, it was a tremendously effective approach for this project. The four components of van Merriënboer and Kirschner's model helped the author consider the various types of content learners would need to engage in the deliberate and focused practice necessary to improve their performance. Further, this approach provided a useful framework for aligning content with learning tasks in a way that led to the integrated learning experience both the author and the client hoped for at the outset of the design process.

Application with other layers. The content captured for use in the training was integrated with the overall strategic plan and supported the experiential and reflective learning patterns which were incorporated into the overall design of the training. The cognitive and conceptual content described previously (e.g. principles and philosophies underlying the practice of mentoring) was used largely to prepare learners for the learning exercises and tasks that formed the backbone of the training. Within each training module, this content was represented

in the form of readings, which served to focus and direct the interactions PMs would have with their freshmen protégés in the learning exercises which followed. This content was also linked to the message layer of the design in that it initiated an instructional conversation with learners by presenting a particular problem or question (e.g. How to observe students effectively? What constitutes effective listening? etc.) which would then be explored in the learning exercises that would follow. The concepts in the readings also performed a scaffolding function by preparing PMs to engage in focused and intentional interactions with freshmen, which facilitated more productive reflective activities at the conclusion of the module. For example after being presented with content introducing strategies for promoting self-authorship, PMs were positioned to ask reflective questions, observe the outcomes of employing this strategy, and then reflect on the degree to which they performed this skill successfully. This cycle of abstract conceptualizing, concrete experience, and reflection on experience (Kolb, 1984) was employed as a key strategy in facilitating learning across the entire course of the training.

Behavioral content was represented in the skill-development checklists and conveyed messages to learners regarding their role in the learning process (i.e. to initiate conversations with students) as well as messages regarding the typical or accepted behaviors and actions for the PM role (i.e. listening more than speaking, observing affect, and avoiding rapid-fire interrogatory questions). The reflective writing learners engaged in at the conclusion of each module was then designed to promote connections between this content and the authentic experiences PMs had with their freshmen students. This process of using focused reflection to integrate conceptual and experiential understanding was a key strategy underlying the overall design of the training.

Because the training includes a significant self-directed component, the metacognitive content included in the design was important in preparing learners to invest in and participate

fully in the experiential learning exercises built in to each of the modules (Moon, 1999). This content also influences the messaging component of the design by conveying messages regarding the importance of adopting a growth orientation to learning, embracing vulnerability, welcoming correction and feedback, and reflecting on experience as a tool for growth.

Strategic Plan

The basic strategic approach for the design was one of experiential and reflective learning. This strategy is theoretically grounded in the literature on theory of experience (Dewey, 1938), experiential learning (Kolb, 1984), and reflective practice (Moon, 1999). As discussed in the early sections of this report, the fundamental goal of the training was to increase the skill level of PMs, specifically as it related to their interactions with the freshmen students they mentor. An analysis of existing PM training models and resources in use on other campuses revealed that skill-development is rarely viewed as an instructional goal for these training programs. Rather, training consists in the transmission of large amounts of information (e.g. campus policies, descriptions of various campus resources, and written lists of strategies for engaging with students) and conceptual discussions of the mentoring process. Based on early discussions with the client and an analysis of the training needs of the FM program, it was determined that simply providing content to learners would be insufficient for them to acquire the core skills identified in the task analysis process. Instead, it was determined that the summer PM training being developed would rely heavily upon the authentic experiences PMs would have with freshmen during their participation in the 2011 summer term FM program and capitalize on these experiences as a source of meaningful learning.

An overall philosophy guiding the design was that a certain degree of freedom should be provided to learners, such that they could make pre-determined decisions relative to the content

they would view and the way in which they would complete learning tasks, but that a certain level of structure and order would be necessary to facilitate productive experiential learning for participating PMs. This philosophy was influenced by Dewey's views on a theory of experience, most notably the inadequacy of relying solely upon authoritarian delivery of content knowledge, with the concurrent need to avoid completely free or unstructured learning environments (1938). Consequently, the design incorporated sufficient constraints to direct and focus PM learning on the desired content and skills, while still allowing some freedom in determining how to accomplish the learning goals identified for the training. These constraints were deemed necessary, due to the fact that the majority of the participants in the training were novice PMs who were unlikely to be capable of structuring their own learning in ways that would maximize learning gains.

Additionally, Kolb's experiential learning cycle suggests that learning from experience is augmented when learners are engaged in activities which assist them in moving from *concrete experiencing* of particular events to *abstract conceptualizing* based on those experiences (1984). Jennifer Moon extends this theorizing by suggesting that focused reflective activities can play a critical role in determining the quality and impact of this conceptualization process upon future actions and behavior (1999). Consequently, additional instructional elements were incorporated into the present design (e.g. conceptual readings and written reflective exercises) to facilitate more focused and productive learning experiences for PMs. Ultimately, a modified experiential learning cycle was developed based on these literatures and involved the four-component process which included (a) initial conceptualization, (b) concrete experiences, (c) written reflection on experiences, and (d) further experimentation.

This strategic pattern was employed in each of the instructional modules and influenced both the selection of content and the sequencing of instructional events within modules. Additionally, modules were sequenced strategically so that skills and experiences built upon one another across the training and culminated in a comprehensive focus on the task of initiating conversations. This strategic sequencing was employed to facilitate continuity of experience wherein each phase of the training could be carried forward into subsequent learning experiences and reflected upon in connection with new content and experiences (Dewey, 1938; Kolb, 1984). The written reflection component of the cycle was then employed to facilitate the integration of these varied concepts and experiences, as well as to invite learners to consider how they might use future interactions with freshmen to continue to experiment and refine their mentoring skills (Moon, 1999). This overall strategic pattern, which appears in Figure 3, was seen as a means of promoting a cycle of continued learning and growth that could extend across PMs' summer training experience.

Use of learning goals. Learners were made aware of instructional goals through a variety of methods. At the outset of the training, learners were made aware of the overall instructional goal for the training (i.e. to improve core mentoring skills) in an orientation meeting as well as in a written overview which was emailed to each learner. Additionally, at the beginning of each training module, learners were provided with a written guide describing the instructional objectives for the module and how they mapped on to the various learning tasks that would be completed during the module. It was believed that by informing learners of instructional goals prior to their participation in the training, they would develop an increased level of expectancy and be prepared to understand how various aspects of the instruction (e.g. a reading assignment or practice exercise) were aligned with these goals (Gagne, 1995).

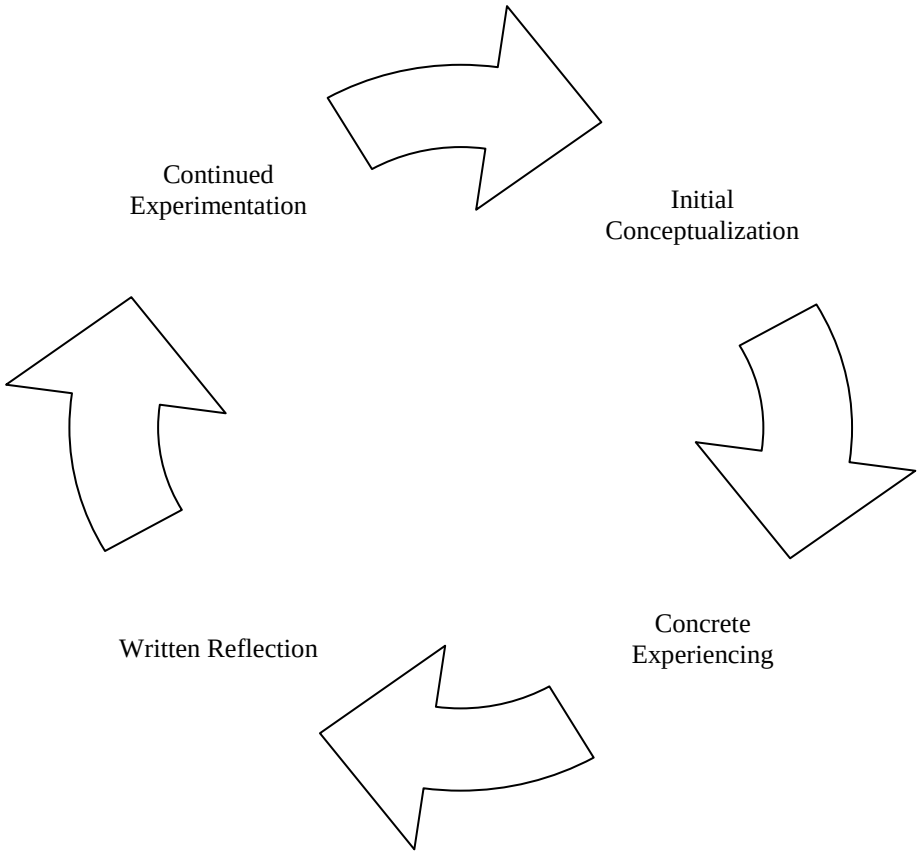

Figure 3. Modified experiential learning cycle

Because instructional goals focused on the development of a number of overt skills, it was also necessary to provide descriptions of how to perform these skills. As described previously, these descriptions were provided using skill-development checklists and served to inform learners of performance expectations for each of the mentoring skills focused on in the training. Similarly, live demonstrations and recorded models were used to assist learners in developing a more clear understanding of how these skills were to be performed and in what contexts. Not only did these methods (i.e. checklists and demonstrations) make learners aware

of the instructional goals for the training, they served an important instructional purpose by clearly describing and demonstrating what was to be learned.

Use of assessments. Although assessments were included in the design, they were used largely as a pedagogical tool to enhance the learning of the participating PMs. The pre-assessment for the training described in more depth previously in this document involved learners in recorded mentoring role plays where they "mentored" an actor playing the role of a freshman. While these recordings were reviewed by program administrators, one of the most valuable aspects of the assessment was the learning that occurred for PMs as they watched their recorded role play and analyzed their performance. Additionally, PMs also observed recorded performances from experienced PMs which served as models of highly skilled or competent mentoring performance. This assessment was included in the design to, in part, address the *unskilled and unaware effect* described previously in this report (Kruger and Dunning, 1999). It was hoped that by allowing learners to view both their own performance and a "model" performance, they would be better positioned to make comparisons between the two, recognize areas of incompetence in their own ability, and be more receptive to the training which would follow. This assessment was also seen as a means of gaining learners' attention by providing a problem (i.e. incompetence) that they could then seek to solve during the course of their training experience (Gagne, 1995).

Written reflections occurred throughout the training experience and were used strategically as a means of integrating the learning PMs accumulated from readings, learning tasks, and practice sessions. These assessments invited learners to assume a position as an observer of their experiences, make meaning from them, and connect these observations to conceptual understanding acquired from their readings. This reflective practice has been

theorized to be a key component in reflective learning (Boyd & Fales, 1983; Moon, 1999) and was also seen as a means of promoting the integrated learning necessary for the performance of complex skills like peer mentoring (van Merriënboer & Kirschner, 2007). Additionally, the prompts for these reflective assessments were designed to promote the *active experimentation* described in Kolb's experiential learning cycle (1984) by inviting learners to identify ways in which future interactions with freshmen might be improved through more focused application of learned skills.

Selection of instructional tasks and activities. To support the overall strategy of experiential learning employed in the design of the training, instructional tasks were selected to provide learners with opportunities to practice and refine mentoring skills in complex, realistic, and authentic environments (Driscoll, 2000; Duffy & Cunningham, 1996). These tasks capitalized on the interactions PMs were having with freshmen already, but invited PMs to view these interactions as learning or skill-development opportunities. This approach was adopted based on a recognition that peer mentoring is a complex activity which requires PMs to flexibly respond to a variety of types of freshmen and a myriad of complex situations. By embedding learning within meaningful and complex environments, it was hoped that PMs would develop the skills and understanding necessary to successfully navigate complex mentoring environments once the training had concluded.

Learning tasks were also selected based on their ability to promote social negotiation among learners. Generally, these tasks consisted of role plays, simulations, and peer evaluations which provided opportunities for learners to hear multiple perspectives, provide and receive feedback on performance, and to collaboratively identify insights and solutions for dealing with complex challenges which arise in the mentoring context. This process of social negotiation,

though not present in every learning task, was viewed as a means of helping learners to judge the quality of their performance and to provide support for learning and practicing more effective strategies for applying mentoring skills (Driscoll, 2000). Collaborative learning tasks also provided learners with the opportunity to engage in the "discourse" of mentoring and to feel a part of the FM community of practice. This was particularly true in cases where learning tasks brought novice and experienced PMs into contact with one another in a practice or role play setting. Researchers have suggested that these novice-expert interactions can facilitate meaningful learning for both parties as novices are provided with opportunities to observe skilled performances of community practices and experts are exposed to unique insights and perspectives provided by newcomers (Krippendorf, 2006; Lave, 1991; Pea, 1994).

Because of time and resource constraints, the design of the training involved a great deal of self-directed learning among learners; consequently, care was taken to select learning tasks which encouraged learners to assume ownership for their own learning. One of the goals of the training was to prepare PMs to be able to function independently and to manage their continued development once the period of intensive summer training had concluded. Accordingly, it was important that learning tasks facilitate an increased sense of responsibility for learning among PMs and provide opportunities to structure learning tasks in ways that met learners' unique needs (Duffy & Cunningham, 1996; Honebein, 1996; Perkins, 1991). Learning tasks involving reflection and self-evaluation were also selected to assist learners in engaging in metacognitive activities which could help them become more aware of what and how they were learning. This process of helping learners become more aware of their cognitive processes has been associated with more strategic and intentional behaviors among learners (Driscoll, 2000), one of the goals of the training.

Augmentation of practice and support for learning processes. Learners were provided with a variety of resources and tools to support them in practice settings including readings, checklists, and conceptual models. These tools were designed to provide learners with conceptual frameworks which they could draw upon as they applied mentoring skills in the learning exercises described previously (van Merriënboer & Kirschner, 2007). The skill-based checklists developed for the training were seen as particularly valuable in supporting learners in practicing recurrent aspects of the mentoring role and also became self-evaluative tools which learners could use to assess their performance following practice sessions.

Feedback from co-learners and supervisors was also an important aspect of the overall instructional strategy and was used to augment the learning that took place during practice sessions. Most feedback was delivered to learners by other PMs who participated with them in role play exercises held during weekly instructional sessions. Typically, PMs used simple peer-evaluation forms or the skill-based checklists to provide focused and specific feedback to one another. Supervisors and training facilitators were also present in these settings and provided feedback to learners as much as was possible. Written feedback was also provided to learners in response to their written reflections and attempted to raise new questions, validate effective performances, and make suggestions to learners regarding additional strategies they might employ in their conversations with freshmen. These various forms of feedback were used strategically to provide learners with insight on their performance, emerging understanding, and ways in which they could continue to refine their mentoring skills (Bransford, Brown, & Cocking, 2000).

Both live and performance models were also provided for learners to assist them in visualizing what was expected in a skilled performance. Learners were then asked to reflect on

the practices or behaviors exemplified by these models, both in written format and in dialogue with other learners. By both viewing and then reflecting on these performance models, learners were positioned to better understand the inner mental processes employed by highly-skilled performers and, then, develop their own cognitive frameworks which they could draw upon to guide their own performance (Van Gog, Paas, & van Merriënboer, 2004).

Finally, the design for the training placed heavy emphasis upon and support for the articulation of learnings by engaging PMs in frequent written reflection on their participation in practice and learning exercises. These reflections invited learners to consider what they were learning through their participation in the training, identify gaps in understanding or deficiencies in their skills, and identify ways of promoting continued growth during the training experience. Additionally, these written reflections were designed to help PMs review or "relive" their practice experiences, so as to encourage meaning making and planning for future interactions (Moon, 1999).

Use of narrative. A design goal outlined at the outset of the project was to facilitate a narrative learning experience for PMs that would attend to aesthetic elements of instructional design and promote meaning, coherence, and excitement for PMs during the course of their learning (Parrish, 2007). This type of design was also seen as a means of increasing the ability of the training to have a lasting impact upon PMs, their perceptions of their role, and their eventual interactions with freshmen students. Accordingly, the final design and sequencing of instruction placed emphasis upon creating a narrative plot and attempted to address the unique needs and potentials of both the beginning and the ending of the instructional experience. Specifically, the training was introduced at the beginning of the summer term in a large group meeting where PMs were invited to embark on a journey of personal growth. During this

orientation meeting, PMs also discussed together the risks and rewards associated with this journey and the challenges they should prepare for (e.g. the distractions of summer, potential for burn-out, and mechanized behavior). Additionally, each PM in attendance at the meeting received a personal letter from one of four veteran PMs in which the veterans described their own growth as a PM, the effort necessary to experience meaningful growth, and an invitation to fully invest in the training experience.

At the conclusion of the training in August, PMs were convened for a similar meeting where they reflected on how the various components of the training experience were connected to one another, shared narratives describing the personal growth they had experienced during the course of the summer, and were formally welcomed into the FM program as competent and skilled PMs. Although, no formal evaluation of these bookend experiences took place, they appeared to have provided a more aesthetic experience for PMs by, initially, inviting them to see themselves on a personal journey of growth and, at the conclusion of the experience, assisting them in both celebrating their learning and connecting the various aspects of their experience in a meaningful and cohesive way.

Control Plan

The LMS interface used during the training (a) notified learners of when some type of control expression was expected (e.g. upload an artifact to the "dropbox"), (b) communicated to learners what constitutes an appropriate control input (e.g. textual document, key strokes in a text editing tool, etc.), (c) displayed the content associated with learner responses (e.g. the content of written reflections submitted through the LMS), and (d) responded to student actions (e.g. "You have successfully submitted your document to the dropbox") (Gibbons, Lacy, Drake, & Pratt, 2004). Because learners' participation in instructional events (i.e. learning tasks and exercises)

generally took place outside of the LMS, these control elements largely informed transitional processes which occurred between instructional events.

Learner responses within the instructional conversation consisted largely of the written reflections submitted at the conclusion of each module. These reflections provided learners with opportunities to demonstrate the accomplishment of instructional goals by articulating new understanding, describing successful applications of learned skills, and making thematic connections across training modules. Additional responses were made in face-to-face instructional settings as PMs participated in practice exercises, role plays, and simulations.

The main control devices involved in learners' interaction with the LMS were the mouse and keyboard. Learners selected content to be displayed, indicated desire to navigate through various aspects of the instruction, and uploaded artifacts to the LMS using simple mouse clicks. A keyboard was used when learners wished to complete written reflections using the LMS' text editing tool or when they wished to respond to instructor feedback provided through the LMS' "Gradebook" feature.

Messaging Plan

Messaging was used to increase the conversationality of the training and to define dominant patterns of conversation present in the design. Although the training did not rely exclusively upon traditional face-to-face informational exchanges between instructors and learners, it met Gibbons' broader definition of conversational activity. According to Gibbons, conversations can be defined as any activities where (a) information is exchanged, (b) participants make a conscious choice to interact, (c) there is willingness among participants to listen and reflect prior to responding, and (d) the interaction has a shared purpose for learners (2008). This more encompassing definition aligns with various features of the design including

the representation of content using readings, the clear focus on promoting the development of mentoring skills, and in particular, the training's heavy reliance upon reflection as a tool allowing learners to respond to instructional events and make meaning of their experiences.

The fundamental strategic intentions of the design were communicated to learners using messaging, most notably that they seek out authentic learning experiences, engage in regular reflection on and evaluation of their learning, and that they approach the training as an opportunity for personal growth and development. These intentions were segmented into message elements which included purposes and objectives for instructional tasks, invitations to act, and descriptions of expectations and responsibilities for learners. These messages were seen as critical in inducting PMs into their role as active, engaged, and reflective learners. These messages were represented textually in the materials available to learners through the LMS.

The language used by instructors and facilitators as they interacted with learners was also seen as a means of coordinating or influencing the actions and perceptions of individual learners (Krippendorf, 2006; Maturana, 1988). As described previously a key message represented in the training was the theme of personal growth and development and consistent language patterns were used to help frame learners' perception of the training around this theme. The design incorporated Krippendorf's suggestion that metaphors be used to frame perceptions (2006) and made use of a personal journey metaphor to invite learners to approach their participation in the training as an opportunity for personal growth and development. This type of languaging was used frequently in the learning task descriptions and instructions displayed to learners through the LMS and also contributed to the desired style and tone referenced previously in the Design Document portion of this report.

Representation Plan

The messages outlined in the previous section were communicated through a variety of representation channels including written text, graphic representations, verbal pronouncements, and patterns of interaction between instructors and learners. Message elements (e.g. purposes and objectives, invitations, expectations) were mapped to multiple representations to target both auditory and visual modalities and to provide learners with repeated exposure to the key messages embedded within the design. For example, messages regarding the purpose of the training (i.e. growth and development) were represented verbally in the orientation meeting held at the outset of the training experience and, again, in textual instructions provided to learners for the various training modules. Graphic models were also used to represent content-specific messages (e.g. principles of student engagement, qualities of effective written reflection, etc.).

An additional representation channel used to communicate messages, particularly the message of personal growth and development, was the behaviors and actions of instructors as they interacted with learners. Though less visible than the other representation channels employed, this type of representation was seen as critical in conveying messages of purpose and expectation. This assumption was based upon research suggesting that learners make inferences about the types of behaviors most valued by organizations and the underlying purposes of instruction, based on the actions and practices of instructors and administrators (Argyris, Putnam, & Smith, 1985; Tagg, 2002). Consequently, instructors' interactions with learners were used to reinforce the overall purpose of the training by emphasizing personal growth, inviting learners to take responsibility for their own learning, and representing a sense of respect for learners as competent agents with the ability to structure and organize their learning within the constraints of the training program. This alignment between explicitly stated messages—what

has been termed in organizational literature as “espoused theory”—and messages represented in behaviors and actions—described as the “theory in use” (Argyris, 1992)—was important to avoid confusion and frustration among learners as they worked to meet training objectives.

Media-logic Plan

The technological tools used to administer the training were minimal and the LMS used to display learning materials did not perform any significant actions in response to learners. Consequently, the media-logic aspect of the design consisted largely of directions given to instructors and training facilitators governing their role in supporting learners as they completed training tasks.

Instructor involvement in the training generally occurred in two settings: weekly instructional sessions and biweekly accountability interviews. Instructor-learner interactions in these settings were governed and directed by a general set of principles and rules outlined by the designer and the FM program director, Dr. Esplin. Instructors were directed to ensure that their conversations and interactions with learners (a) clearly described the purposes of any instructional events being administered (e.g. a role play or peer evaluation conducted in a weekly instructional session); (b) as appropriate, modeled the skills emphasized in the training modules (i.e. noticing and observing, listening, and asking questions); (c) invited and encouraged reflection on the learning process; and (d) provided useful and specific feedback to learners regarding their performance (e.g. feedback following role plays, written responses in the LMS to learners’ reflections).

Data Management Plan

Data resulting from learners’ participation in the training were largely used by instructors and program administrators to monitor individual learners’ progress towards instructional goals

and to make decisions about when and how to provide any needed remediation. Additionally, these data were made available to learners to allow them to making judgments regarding those skill areas where they would like to seek out additional learning and practice experience.

Data were managed within a variety of systems. Reflection data were captured and stored in the LMS and then made available to instructors for analysis. Biweekly reflective survey data were captured and stored within the survey administration tool used in the training (i.e. Qualtrics). Qualtrics was also used to perform simple analyses of quantitative data and to generate reports containing aggregate data for the entire group of learners (e.g. means for the group's response to various survey items). These formative data played prominently in the development of the summative assessment plan outlined previously (i.e. post-then analysis). Data collected from the pre-assessment, both recorded video footage and accompanying commentary, were captured and stored using the REACT tool provided to the designer by BYU's Center for Teaching and Learning.

By capturing both quantitative and qualitative data, instructors were able to detect both knowledge and affect states among learners, enabling instructors to be more responsive and adaptive in their face-to-face interactions with learners (Gibbons, 2008). In addition to the data described in the paragraphs above, instructors also collected and interpreted data during their face-to-face interactions with learners, sometimes without even being aware of it.

Original Design Plan

The initial design plan for the training called for the design to be carried out in three distinct phases or sub-processes, including development, implementation, and evaluation of the training. Although it was anticipated that departures would be made from these initial plans, they were documented at the beginning of the project to facilitate timely completion of the

design process and to ensure that initial design goals were attended to across the design process. Each of these phases is described briefly in the sections which follow.

Production

A literature review and initial conceptualization for the design began in April 2011 and included the development of a project proposal and initial design document, which were finalized and approved at the end of May. Production of instructional materials was then scheduled to begin in late May and extend through June. This production process included the development of instructor, learner, and assessment materials. A brief description of the steps involved in producing each of these types of materials is included in the paragraphs which follow. Additionally, this production schedule is represented in the proposed design timeline appearing earlier in this report (see Figure 1).

Instructor materials largely consisted of outlines for group instructional sessions, lecture guides, and presentation slides for use in group sessions. Typically production of these elements followed a process involving, first, an articulation of the specific objectives or instructional goals for the particular session. Based on these objectives, instructor materials were drafted and then examined to ensure alignment with the overall design goals for the training (see Design Goals and Criteria). Once prototypes of these materials were developed, feedback was sought from FM administrators, including Dr. Esplin. Once the client indicated that the materials met their approval and the author had verified that they met design goals, they were considered ready for implementation.

Learner materials consisted of procedural and supportive information (i.e. checklists and models), as well as instructions for completing the learning tasks associated with each training module. The conceptual models used in the training had been developed previously by the FM

program; consequently, very little production time was spent developing these materials. Checklists were produced based on both the task analysis performed at the outset of the project and discussions with the client where specific behaviors and actions were identified for each of the mentoring skills the training sought to develop. Based on these discussions, a focused set of behaviors was articulated and described in checklist format. Veteran PMs were involved in producing initial checklist prototypes; the author then produced the final checklists used in the training based on feedback from the client and ideas generated in the prototype checklists.

Instructions for completing each of the training modules were developed according to a fairly consistent pattern involving (a) articulation of learning goals/objectives for the module, (b) selection of readings and learning exercises for the module, and (c) a review of the readings and learning exercises to ensure alignment with stated design goals. Once this process was completed, the author developed instructions which described to learners the objectives for the module and the way in which learning exercises were to be carried out. Instructions were then tested with small groups of PMs to ensure clarity and then published on the LMS.

Production of assessment materials involved significant involvement from Dr. Esplin and Dr. Pinnegar. Development of these materials consistently began with a discussion of the particular learning the assessment was intended to capture or measure. Additionally, because one of the goals of the training was to use assessments as reflective tools for learners, discussion frequently centered on the types of assessments which were most likely to facilitate meaningful learning for PMs. Possible designs were then brainstormed and discussed based on these identified goals and the author drafted initial assessment materials. These materials were then refined through a cycle of review and feedback among the author, Dr. Esplin, and Dr. Pinnegar.

Implementation

The original implementation plan consisted largely of directions for the posting of learning materials to the LMS. Training modules were conceptualized as extending across a period of one to two weeks. At the beginning of each module it was anticipated that the author would post learning materials (i.e. readings, checklists, instructions, etc.) to the LMS and make them accessible to learners. Additionally, the implementation plan called for an email to be sent to all learners notifying them of the beginning of the module and directing them to access learning materials through the LMS.

When instruction involved face-to-face interactions in group meetings or practice sessions (i.e. those which took place in the FM "Glass Room"), only minimal site preparation was planned. For group instructional sessions, a department secretary would be asked to schedule classroom space through the BYU campus scheduling office. It was also expected that, a few minutes prior to each session, a training facilitator would ensure that any technological equipment needed was in working order and that electronic content was ready to be displayed on the computer projector. Any needed materials would also be prepared for distribution during the session. During instructional sessions, training facilitators and experienced PMs would provide feedback to learners as necessary.

For those practice exercises conducted in the FM work room, planned preparation included providing instructions for practice exercises on the white board in the room and ensuring that any needed evaluation forms, checklists, etc. were available to learners in the designated area at the front of the room. It was anticipated that these responsibilities would be performed by the author at the beginning of each week during the summer term.

Formative Evaluation

Evaluation of the training during production and implementation consisted of regular meetings with the client to discuss effectiveness of the training, biweekly survey data collected from learners during their participation in the training, and biweekly interviews conducted with learners during their participation. The overall goal of these evaluative activities was to gather information about the training, from both the client and individual learners, which could be used to make modifications to the design and increase its impact on participating PMs.

Production. Formative evaluation of the training was anticipated to begin early in the development process. It was understood that the author would meet with Dr. Esplin and Dr. Pinnegar frequently to obtain feedback on the overall design of the training and to negotiate key design decisions which surfaced during development (e.g. how to assess PM learning, what types of supportive tools to provide to PMs). A set of guiding questions were identified to provide formative feedback on the design: Is the current design likely to facilitate the type of learning hoped for in the training? Do the elements and features of the design align with and support FM's values and beliefs about learning? In its current state, is implementation of the design feasible given time and personnel constraints? Although this aspect of the evaluation plan did not call for the collection of formal data, these questions were seen as critical in generating the feedback necessary to agree on a final design which could then be implemented with learners.

Implementation. Once the training was prepared and ready for implementation among learners, the formative evaluation plan included the administration of biweekly electronic surveys to learners as well as biweekly personal interviews conducted with learners by program administrators (including the author). These evaluative tools were seen as a means of both determining the evolving skill and confidence levels among learners, and gathering feedback

from learners regarding their experience in participating and completing the training. It was anticipated that survey data would be reported to program administrators on a periodic basis to provide insight into how PM skill and confidence levels were evolving over time. Additionally, as was the case during production the author and FM program administrators planned to meet weekly to share observations made during the biweekly interviews. It was believed that these data and observations could be used to make decisions about areas of emphasis and practice for weekly instructional sessions.

Projections

The most significant projected cost for designing the training was the time it was anticipated that the author, FM administrators, and veteran PMs would spend in developing and maintaining the training. In the project prospectus, it was anticipated that the author would spend 15 – 20 hours each week from May through August 2011 conceptualizing the design, developing training materials, and implementing and evaluating the training. Additionally, the proposal stated that PMs in supervisory roles would spend approximately five to ten hours each week assisting in various aspects of the design process. Though other FM administrators were involved in development and delivery of the training, their time commitment was never anticipated to be excessive or to significantly alter their workload. Because the training was conceptualized to be largely self-directed by individual PMs and would make use of pre-existing technological and physical resources, it was believed that the training could be maintained and sustained across the desired time frame.

Projections related to the need for specialized skill included personnel with experience in instructional design as well as individuals with expertise in peer mentoring and first-year experience programming. Because the author, as well as FM administrators (most notably, Dr.

Esplin), were seen as possessing this set of skills and experience, it was not anticipated that external personnel resources would be required. Although the client hoped that the project would result in the development of a model that could be used in successive years, it was recognized that the 2011 summer term was a period of initial testing. Consequently, the initial lifetime for the training was seen as encompassing only the 2011 summer term (i.e. June through August). However, the client was hopeful that the 2011 version of the training could, after initial evaluation, be modified for use in successive years. Because of the flexibility of the design, it was believed that the basic training model (i.e. readings, checklists, learning exercises, reflections) could be modified in the future to address a number of skill areas for both novice and experienced PMs. Though this would require additional administrative time in selecting readings, designing new learning exercises, etc., it was seen as favorable to the prospect of developing a completely new training model. Thus, this project was seen as a means of developing a basic training model which could be evaluated and refined for use in the future.

Project Outcomes

The sections which follow describe the actual outcomes of the production, implementation, and evaluation phases of the project. In the initial plan for the project, these activities were anticipated to take place as relatively distinct phases. However, as the design unfolded, a great deal of overlap across these phases was observed. An articulation of this and other key learnings and insights gained by the author during the project is also included in an effort to increase the usefulness of this report for other designers.

Production

Development and production of learning materials and exercises extended far beyond the time allocated in the initial plan. The conceptual model for the training (i.e. the 4-CID approach

and reflective learning) was not finalized until early June, after a task analysis of the PM role had been performed. This delayed the development of learner and assessment materials, which took place from June through August. Though only a single version of the training was developed, the initial plan was modified in significant ways, which are described in the Design changes during initial production section below.

Actuals. As anticipated, the production of training materials consumed a significant amount of time for the author; however, the actual cost in time amounted to approximately ten hours per week from June through August 2011, less than what was initially anticipated. This was also true of the time expended by supervisory peer mentors in their roles in producing training materials, which amounted to approximately two hours per week. As a result, the cost savings to FM in terms of salaries and wages was fairly significant (approximately $4,000).

The necessary instructional design and peer mentoring skills were available in the necessary quantities when needed during production. However, additional technical skill was required in early June when the pre-assessment for the training (i.e. recorded mentoring role plays) was being developed. This skill and expertise was provided by Mike Johnson, from BYU's Center for Teaching and Learning. No additional or unforeseen skill areas were required during production.

Carrying out production demonstrated that making projections relative to production costs is an imperfect science at best because, generally, projections are made at a stage in the design process where the realities of the design process are not yet fully understood (e.g. demands on time from other projects and responsibilities, capabilities of designers and others involved in production, and unforeseen needs which have not yet become apparent). Nonetheless, making projections is an important aspect of developing a production plan, not only

to provide clients with a set of expectations, but to focus and direct a design team's work. The current project demonstrated that there may be some wisdom in making realistic projections regarding costs, but to inflate projections slightly so as to provide the ability to comfortably come in under projected cost. However, care should be taken in doing so in order to avoid creating unnecessary alarm or concern for the client at the sight of overly high projected costs.

Design changes. A number of changes were made to the initial design plan during the production phase. In response to the task analysis which was performed in late May, an additional instructional module was added to the training ("Noticing and Observing") to address a skill area which was not anticipated in the original plan. In early June it also became apparent that the initial plan did not include any consideration of how to prepare learners for or orient them to the training; consequently, a brief introductory module ("Growth Mindset") was also added to the training. Additionally, the original plan for sequencing the modules was modified to allow learners to be introduced to skill areas in a simple to complex sequence (i.e. noticing and observing, listening, asking questions), with a culminating emphasis on initiating conversations. This sequencing of modules also allowed for more effective integration of skills and understanding across the training experience because each subsequent module required application of skills developed in the previous module(s) (van Merriënboer & Kirschner, 2007).

Another significant change in the design came in early June when it was decided that, rather than employing performance rubrics as a pedagogical and evaluative tool, the design would rely heavily upon skill-development checklists. This shift occurred based on the design team's recognition that novice learners were more likely to benefit from simple checklists outlining a set of desired behaviors for each skill, rather than more complex rubrics describing various levels of competence for each skill. While program administrators and training

facilitators occasionally used rubrics in making informal evaluations of PMs skill, learners were provided with checklists for each of the skills emphasized during the training. These checklists were used by learners to guide their performance during learning exercises and also provided an effective peer- and self-evaluation tool when learners were asked to make evaluations of their own or others' performance.

Issues and learnings. One of the earliest lessons learned during initial production of the training was that, rather than being an isolated phase, production overlaps with and is heavily influenced by both the implementation and evaluation aspects of projects. At first, it was rather discouraging when production was falling behind schedule; however, it proved relatively fortuitous because it allowed the eventual design to be more responsive to unexpected discoveries, new insights, and resource shortages that emerged later in the design process. So, while being well prepared and on-schedule is nice, it may be more important to leave room for flexibility and responsiveness to the dynamic design process.

Implementation

Once implementation of the training began, there were no significant departures from the implementation plan outlined previously. However, the training was extended by two weeks and a more strategic and formal conclusion to training was developed and implemented at the end of August. These modifications to the implementation schedule were influenced largely by the desire for the training to be experienced by learners as a cohesive narrative experience.

History. The training was launched with learners in mid-June with an initial orientation meeting and an abbreviated one-week introductory module designed to introduce learners to the objectives of the training and the attitude FM administrators hoped learners would adopt with regard to their summer training experience. A pre-assessment exercise was also conducted at

this time, largely to help learners assess their initial skill level. Skill-development modules began during the last week of June and extended through the second week of August. These phases of implementation proceeded with only minimal deviation from the original implementation plan.

In early August, it was decided that learners would benefit from an additional concluding module designed to assist them in integrating and articulating the learning they had experienced across the summer. This module was delivered and implemented in mid-August. A formal conclusion to the training experience was implemented at the end of August during the FM program's "Fall Training Workshop" and provided learners with additional opportunities to refine and practice the mentoring skills developed over the summer. Emphasis was placed upon using these skills to initiate mentoring conversations. These modifications to the implementation plan (i.e. the concluding module and formal end to training) extended the training experience by an additional two weeks.

Issues and learnings. One important insight that came during implementation of the training was that the beginnings and endings of instructional experiences are tremendously important in determining whether instructional goals can or will be met. At the suggestion of wise mentors, additional attention was given to the initial learning experiences embedded in the design. These proved to be important modifications to the initial design plan and were influential in increasing learners' motivation and engagement in the training. Additionally, they helped to clearly communicate the objectives of the training, which is believed to have led to increased focus and intentionality among learners. Designers may at times want to skip to the "meat" of the content of the training—which for this project were the mentoring skills outlined in the task analysis—and be tempted to minimize time spent preparing, focusing, and orienting

learners. However, for this project, the additional week devoted to these activities proved to be highly beneficial and was seen as improving the learning that happened within the skill-based modules which came later. Similarly, the learning activities built into the conclusion of the design (i.e. the concluding reflection, intensive role play exercises, and formal culmination activity), brought a meaningful sense of closure to PMs' summer training experience, seemed to deepen their learning, and helped them to make clear connections between the skills they had developed and the mentoring work they would do during the upcoming fall semester.

Unexpected problems with the video analysis software used in the pre-assessment for the training also led to useful insights on the implementation process, specifically as it relates to the use of technological tools to facilitate learning. The tool adopted for use in the pre-assessment was initially designed by BYU's Center for Teaching and Learning (CTL) for use in an undergraduate business communication course (M COM 320) to allow mock job interviews to be recorded and then analyzed by faculty members. Consequently, the design of this tool attended to only those needs identified by the faculty members teaching this course. For the pre-assessment associated with this project, it was hoped that learners would have the ability to view their recording and then provide analysis and commentary using the tool. Problems were encountered when it was discovered that the analysis tool did not include a feature which would allow "students" (i.e. those who are recorded) to enter commentary on their recorded footage—only those identified as "instructors" or "teaching assistants" in the system had this capability. Working with the CTL, the designer was able to find a way around this challenge, allowing PMs to use the tool to provide analysis of their recorded role plays; however, it delayed completion of the pre-assessment and led to unnecessary work for both the CTL and individual PMs. This experience demonstrated that using technological tools for purposes other than what they were

originally designed for can lead to frustration. However, on a positive note, this experience did provide useful feedback for the CTL in terms of how the tool could be refined and improved for use in future training settings. Thus, this project has in some ways demonstrated and verified the idea that "misuse" of technology can drive innovation and lead to possibilities for technological and design tools beyond those originally intended (Engeström, Hakkarainen, & Hedegaard, 1984; Yanchar and Williams, 2006).

Formative Evaluation

Formative evaluation during initial production of training materials proceeded according to the plan outlined at the outset of the production process, with only minor deviations relating to the frequency of meetings with the client. A formal evaluation meeting w/ Dr. Esplin and Dr. Pinnegar took place each week during the production phase; however, informal evaluation of the design frequently occurred outside of these meetings as new questions or unexpected challenges arose. Typically, prototypes and drafts of instructional materials were evaluated during these meetings, resulting in feedback which was then used to make improvements upon the materials being produced.

Production Adjustments. The evaluative meetings and conversations with the client described in the previous section resulted in two significant changes to the design during the production phase. First, based on recommendations from Dr. Esplin and Dr. Pinnegar, the procedural information, originally included in the design in rubric format, was modified and re-represented in checklist format. As described in earlier sections of this report, this adjustment was made to provide learners with a more clear, concise, and simple description of what, in the client's view, constituted a skilled mentoring performance in the designated areas.

Second, formative evaluation during the production phase heavily influenced the development of assessment materials and led to a modification in the pre-assessment for the training. Dr. Esplin was keenly interested in providing learners with an opportunity to "see themselves" in the mentoring role to facilitate more accurate judgments about their own skill level and readiness to interact with freshmen. At this point it became apparent that more traditional pre-assessment methodologies were not likely to provide learners with truly accurate insights into their performance; consequently, the pre-assessment was redesigned to provide learners with a chance to view their performance during recorded mentoring role play conversations.

Implementation. As was the case during production, formative evaluation during implementation took place according to the plan outlined. As was anticipated, biweekly surveys were administered to learners throughout the summer and individual learners met with program administrators approximately every two weeks for personal interviews. While the biweekly surveys did not yield the feedback hoped for, the learner interviews were invaluable in providing both the author and FM administrators with feedback relating to what PMs were learning, how their skills were being refined, and maybe most importantly, how motivated and engaged learners were at various points in their training experience.

History and resulting adjustments. After the first week of implementation, feedback gathered in personal interviews with learners suggested that the reading assignment for the first module had required much more time than was originally anticipated. Consequently, effort was made to select shorter readings for subsequent modules and to provide more time for engaging in learning exercises by decreasing the amount of time spent completing reading assignments.

Another key event in the formative evaluation of the training occurred in late July when results from the first three biweekly surveys were analyzed. Initially, it was conceived that these surveys would demonstrate growth in peer mentor skill levels across time. However, in reviewing the quantitative data of PMs self-evaluations across the three surveys, no significant differences in self-assessed skill level were observed. Contrastingly, qualitative survey data, in the form of brief narratives describing successful interactions between PMs and freshmen students, suggested that PMs were indeed learning and that their skill in interacting with their protégés was improving. This seemingly conflicting feedback led to the development of a revised plan for summative evaluation of the training, namely the retrospective post-then format described in the design and development narrative which appears early in the report.

Formative evaluation (implemenation) issues and learnings. The formative evaluation activities which took place during implementation were not only useful for the design team and client, but also became productive learning opportunities for PMs. It became clear that evaluation can serve as an important pedagogical tool and play a useful role in the accomplishment of instructional goals. As PMs reflected often on the training experience, they were positioned to articulate how and what they were learning. This frequent engagement in metacognitive activity appeared to help PMs be more intentional and strategic in their learning and to provide them with insight into the patterns of behavior that could facilitate additional learning once their participation in the formal training program had ended.

The unexpected results which emerged from analysis of the biweekly surveys led to important insights regarding the types and variety of instruments used to measure the impact of training programs. In the case of this project, the quantitative data gathered using traditional survey instruments did not fully capture the learning and growth that were occurring during the

time PMs were participating in the training. It was only because of what was observed in the qualitative data gathered through surveys and interviews that the design team first began to wonder if undetected learning may be taking place. Had only quantitative data been collected, the design team may have falsely concluded that the training was having no impact. However, because of the mixed-method approach to evaluation employed, important questions about the impact of the training were raised, a new literature review on alternative evaluation methods was conducted, and ultimately a new instrument was developed (i.e. the retrospective post-then survey format) which helped confirm that learning was taking place.

Projection Actuals

Time, skill, and needed physical resources were all supplied in sufficient quantities to allow the training to remain sustainable across implementation and the training was successfully concluded in late August. Freshman Mentoring administration granted adequate time for the design and development of initial materials and those involved in implementation and administration of the training had ample time to perform their functions. As described previously, skill levels were generally sufficient during all phases of the project. Although additional skill was necessary for the development and implementation of the pre-assessment used in the training, this need was quickly met and did not significantly delay or impede the project.

The lifetime of the training could easily be extended and the training modules implemented with learners during summer 2011 could be re-used to train novice PMs in future summer terms. This would require few additional costs because pre-existing instructional materials and learning exercises could be used or modified slightly. Some time would need to be allocated for a program administrator to provide basic support to learners and to make minor

updates to learning exercises based on the current FM summer program; however, these functions could be performed by a single individual and would require very little time away from other responsibilities. Additionally, the 4CID model (van Merriënboer & Kirschner, 2007) which the training is based upon could be used to develop additional modules (e.g. modules to develop more advanced skills among veteran PMs). This would require FM to allocate time for the development of new materials, conceptualization of learning exercises, and selection of readings; however, time would likely be saved because of familiarity with the theoretical base for the training. Additionally, the evaluation plan for these modules could be nearly identical to the evaluation process which took place during the first implementation of the training. Finally, using a consistent model for the development of training modules, for both novice and experienced PMs, is likely to result in more consistency and alignment across the FM program's comprehensive PM training plan.

Summative Assessment of the Training

As described previously in the report, summative assessment of the degree to which the training increased PMs skill and confidence levels included analysis of the results of a retrospective or "post-then" self – assessment as well as a review of the narrative data gathered through the written reflections submitted by PMs throughout the training experience. Both quantitative and qualitative data were analyzed to provide a more holistic view of the impact of the training upon PMs' development. While quantitative data were useful in making basic judgments about the degree to which PM skill and confidence levels were impacted, they did not provide any meaningful insight into how PMs experiences during the training led to growth. Consequently, a qualitative analysis of PMs written reflections was conducted in an attempt to more clearly understand how the various components of the training experience impacted PM

learning. Results of these analyses, as well as a brief description of the survey instrument used to collect quantitative data are shared below.

Survey Instrument

Quantitative data were gathered using an electronic survey instrument. A traditional post-training survey invited PMs to provide responses to a number of six-point Likert scale items (1 = "Highly unskilled", 6 = "Highly skilled") which addressed their perceptions of both their overall mentoring skill as well as their level of skill in each of the skill areas emphasized in the training (i.e. noticing and observing, listening, asking questions, and initiating conversations). An additional item was included to evaluate PMs' overall confidence in engaging in mentoring interactions with freshmen. A retrospective pre-survey was administered the following day and included similar items; however, these items invited PMs to reflect on their pre-training skill and confidence levels. Survey items for each instrument can be found in Appendix F.

Quantitative Data

Group means for each of the items were compared using a simple repeated measures t-test. The results of these analyses demonstrated that, on the whole, PMs' self-rated skill and confidence levels were significantly higher at the end of the training experience. Not only did PMs overall skill level increase, $t(31) = 7.30$, $p < .001$, but comparisons of post and retrospective pre-scores demonstrated significant differences in skill for each of the skill areas focused on in the training (noticing and observing, $t(32) = 3.65$, $p < .01$; listening, $t(32) = 4.42$, $p < .001$; asking questions, $t(32) = 4.47$, $p < .001$; initiating conversations, $t(32) = 3.31$, $p < .01$). Peer mentors also reported feeling significantly more confident in their interactions with freshmen following the training than they did at the beginning of the summer, $t(32) = 7.21$, $p < .001$. Results of these comparisons can be found in Table 1 below.

Qualitative Data (Written Reflections)

The written reflections submitted by PMs at the conclusion of each module provided insight into what they were learning, how their skill and confidence were changing, and the components of the training experience which were facilitating this growth. Although a more formal narrative analysis of these narrative data is planned for the near future, each reflection was read and reviewed by a member of the FM administration or a supervisory peer mentor. As stated previously, it was this informal analysis of the reflections which first indicated that PMs may be learning more than what was indicated by the biweekly survey data being collected.

Table 1

Changes in Self-perceived Skill and Confidence Levels among Peer Mentors

Skill Area/Confidence	*df*	*t*	M
Overall Mentoring Skill	30	7.30	1.19*
Noticing & Observing	31	3.65	.75**
Listening	31	4.42	.84*
Asking Questions	31	4.47	.91*
Initiating Conversations	31	3.31	.69**
Overall Confidence	31	7.21	1.09*

Note. * = $p < .001$, ** = $p < .01$

The process of reflecting back on experiences they had with students, helped PMs articulate and solidify their learning for particular skills. This theme is well illustrated by the comments of one peer mentor about the way in which effective noticing and observing positioned him to provide customized support to a group of students who were struggling with an assignment:

> I felt like I had a great opportunity to observe and act this week. After class last week . . . I noticed a few students from my class were running around the library. I knew they have [sic] to turn in a research paper topic this coming week . . . . I hurried down to the biology section and found a few students who had no idea how to find books in a university library. Noticing where the students were and what they were supposed to be doing saved them a lot of time and a good deal of frustration.

Early in the same reflection, the peer mentor describes how completing the reading assignment for the module, deepened his understanding of the skill of noticing and observing. However, it was not until he had reflected on an authentic experience with students that he came to understand the value of noticing and observing in his peer mentoring work.

Similar growth in the skill of listening is demonstrated in this quote from another peer mentor's reflection following the listening module:

> I . . . realized that people walk their own paths . . . . I realized this as I was looking through the listening checklist . . . . I have to find out by listening what their path is going to be. I need to understand more about them, their experiences and their desires before I can lead them to find their way to experience college . . . . This point fit in exactly with what the author of The Anthropologist was trying to describe [a reading assignment for the module]. His first trait of anthropologists was that they set aside what they know and believe; they open up their mind.

Later in the reflection the peer mentor describes an experience with one of his students where he did not practice good listening skills and the "awful" feeling he had when the meeting had ended.

In this particular reflection it can be seen how reading assignments, procedural checklists, and reflection on experience can come together to facilitate meaningful learning.

Other reflections demonstrated ways in which PMs developed an integrated understanding of the various skills they practiced during the training modules and how they supplement one another. In her final reflection, submitted at the conclusion of the last module, one peer mentor described how the skills she had developed had improved her ability to engage in conversation with students:

> I have learned to better pay attention to the things that I say through the questions I ask and through my listening. I . . . am also more aware of what people say in their implications . . . rather than just simply listening to the words that come out of their mouth. I have learned the importance of asking questions and how they can really determine the quality and direction of a conversation.

This PMs comments are representative of many others which suggested that PMs, not only developed isolated skills, but were able to see how the sub-skills they learned contributed to an overall improvement in the relationships they built with students.

Finally, a number of PM reflections described an increase in confidence that came about during the time they were participating in the training. One peer mentor described the difficulty of the peer mentor role, but then finishes by stating her belief that she can be successful:

> It can be scary to be a mentor. It's not a simple task. Not all students . . . will want to talk to me. However, I'm learning how to not be afraid to put myself out there, stick out my neck . . . and take risks.

PMs frequently described the way in which a focus on developing their mentoring skills, led to increased comfort in engaging with students. Furthermore, reflections revealed that PMs'

interactions with freshmen became increasingly purposeful and focused as they applied the mentoring skills they developed in the training.

Insights

In attempting to provide a comprehensive report on this project and its various components (i.e. design, production, implementation, and evaluation), and reflecting on its outcomes, a number of key learnings and insights have become apparent. The concluding sections which follow provide summaries of what has been learned during the project including practical, design, and theoretical insights gained.

Practical Learnings

One of the central lessons of this project was that when engaging in the design process, it is virtually impossible to "do everything." It became critical that the design team stay focused on the instructional objectives outlined for the training and continually analyze the constraints that emerged across the lifetime of the project. Frequently, there were aspects of the design that could have been improved or augmented; however, recognition of the available time or resources led the design team to make more prudent design decisions which both met project objectives and acknowledged the constraints that were present. In sum, at times in the design process, accepting "good enough" is advisable.

As the project evolved, it became increasingly clear that creating documentation of the design process (e.g. decisions made, key tasks completed, challenges encountered, etc.) is a valuable exercise. In addition to being extremely valuable when it came time to write a formal report of the project, the process of creating this documentation served as a useful reflective exercise for the designer in which new directions for the project, key questions, and important

insights were articulated. Furthermore, consistent documentation facilitated more effective planning and evaluation throughout the project.

Finally, in reflecting back on how the project unfolded, it is apparent that failures and setbacks encountered during the design process were the source of important progress and learning. For example, the "failed" biweekly surveys implemented during the training, eventually led to the adoption of a much-improved assessment methodology which helped to identify learning gains that would not have been evident otherwise. Thus, taking risks in the design process and tolerating some degree of failure is an important attitude for designers to adopt.

Design Learnings

The initial analyses performed at the outset of the design process, particularly the task analysis, were critical in adding precision to the design. By clarifying the needs of the client and clearly describing the needs of learners, potential design solutions became increasingly clear and the process of narrowing the scope and focus for the training became much easier. Although performing these analyses was time consuming and, at times, felt unproductive, the overall training design which eventually resulted was much stronger because of what was learned during the analysis phase of the project. Of course, analyses can become all-consuming and, if not monitored, could continue indefinitely. Consequently, it was important in this project to recognize when an analysis had served its purpose and should be discontinued to allow time to be spent in other design activities (e.g. development and implementation).

Very early in the project, it became apparent that good design is a collaborative process. Occasionally, design is perceived as an endeavor embarked upon by lone designers who miraculously generate innovative solutions independent of any external support. Although a

single designer spearheaded and led the project, virtually every key design decision made came about as a result of collaborations with others, be it the client, FM administrators, or members of the committee for this project. Furthermore, by involving others, particularly the client, in making important design decisions, buy-in and investment in the training came about rather organically.

Because the training implemented among PMs consisted of a number of components (i.e. readings, checklists, learning exercises, and reflections) and was made up of a number of separate modules, there was high potential for learners to experience the training as a fragmented set of isolated experiences. However, by approaching the design process under the assumption that it was a discourse or "story" that was being designed, some degree of coherence was achieved. From this perspective, it was important that the training have a clear beginning, middle, and end and that there be some degree of "plot" to the learning (Parrish, 2007). Additionally, viewing design through this paradigm helped to maintain focus upon the learners and what they would be doing during the training, as opposed to a narrow focus on activities of instructors (e.g. content delivery or summative evaluations).

Theoretical Learnings

At the conclusion of this project, it seems appropriate to return to the objectives outlined in the introductory paragraphs of this report. Clearly, one goal of the project was to develop a training program which met the client's needs and promoted a particular type of peer mentor development. However, it was hoped that this report would also make a more general contribution to the design field by describing the designer's experiences and articulating the insights and learnings which came about across the design process.

Because a significant portion of this document is technical in nature (e.g. design specifications, rationale for design decisions, and descriptions of instructional materials) there is danger in readers, particularly those unfamiliar with the design field, assuming that design is nothing more than a technical process involving the rigid and systematic application of abstract design principles or blind and mechanical application of a standard design approach. Furthermore, because design reports focus heavily on how the designed instruction effected change among learners, readers and designers alike may mistakenly believe that "students" or "participants" are the only individuals changed by the design process. In reality, because instructional design is concerned with growth, learning, and development, it follows naturally that designers should and will be changed through their involvement in the design process. In the sections which follow, two metaphors are introduced in an attempt to describe key learnings which emerged during this project and how they have impacted the professional identity of the author. It is hoped that this articulation of theoretical insights will both benefit future design projects carried out by the author, as well as compel other designers to view their work from a modified perspective, particularly when that work involves them in designing for complex learning and identity development.

Designers as weavers, or a call for syncretic artistry. At the outset, this project was based on the goal of integrating PMs' knowledge, skills, and attitudes about mentoring. Consequently, early phases of the design process centered on identifying a theoretical foundation which could then inform the design of a training program which would facilitate integrated learning. It was originally assumed that van Merriënboer and Kirschner's 4CID approach to instructional design could serve as this theoretical foundation because of its emphasis upon designing for complex learning. However, as the design unfolded and unexpected challenges

arose, it became clear that a single theory would not suffice. Rather, what was needed was a more syncretic design woven together from a diversity of theories and which could effectively attend to the varied layers of the design.

The belief in the existence of a comprehensive theory, one which can inform all aspects of a design, is common among instructional designers. As a discipline, designers often naively hope, search for, and in some cases even believe they have found, a universal theory of design which prescribes what to teach, when to teach it, and how. Indeed, many designs arise from a theoretical zealotry, largely unbalanced by any other frameworks or perspectives. These designs, grounded in an overly narrow range of theoretical positions, are inadequate in facilitating the types of complex learning they purport to advance (Eisner, 1984; Schwab, 1969), fail to acknowledge design as a process which must attend to a variety of interconnected layers (Gibbons & Rogers, 2009), and, ultimately, are unable to successfully address unique and multi-faceted challenges which arise in practical design contexts.

The current project has demonstrated the need for an approach to instructional design which 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 the 4CID approach was tremendously useful in informing the overall structure of the training, it was an inadequate tool for making decisions about a number of other key elements of the design, including how to motivate learners, promote reflection, model good mentoring, celebrate learning and make it public, just to name a few. In retrospect, it is clear that each layer of the design (e.g. strategy, content, messaging, and control) presented its own problems to be solved and, consequently, each layer was informed by a slightly different set of theoretical perspectives.

On the surface, this practice of weaving together a diversity of theoretical perspectives might be viewed as eclectic. However, eclecticism in instructional 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. This was not the case in the present design. In reflecting back on the process of developing, designing, and implementing the PM training associated with this project, it is clear that the designer was operating from what has been described previously in the 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 designers to engage productively in what I term *theoretical weaving*, a process wherein a designer 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 which a skilled instructional designer can employ in her craft according to the unique needs of a given design challenge (2011).

The process of design weaving can thus be viewed as a syncretic art, requiring a particular type of designer. A design weaver or syncretic artist must, first, have a broad understanding of a variety of theories which can inform the design of instruction, including but not limited to design theories, learning theories, and instructional theories. A design weaver is also one who 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, a design weaver should work to develop a well-articulated and increasingly clear conceptual design sense. This will occur only as designers engage in frequent and critical reflection on their practices, work to articulate their emerging understanding, and participate in dialogue and deliberations with others who can challenge their assumptions and augment their evolving design sense. As designers clarify and refine their conceptual design sense, it becomes a useful filter or meta-tool for identifying those theories and conceptual tools which are appropriate for a given design task. Finally, design weaving requires a designer who possesses 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 designers to flexibly apply and weave together a

diverse set of theories to create designs which are simultaneously hybrid, intentional, and cohesive.

Although, in the present design, eclecticism may have occasionally crept in to some aspects of the decision-making process, it is hoped that the vast majority of decisions, though informed by a diversity of theoretical perspectives, have been woven together in a meaningful way that is both aesthetic and effective. At the very least, the author now has a worthy goal to aspire to in future designs.

Design as a narrative of being and becoming. As has been stated repeatedly throughout this report, it was hoped that the training designed for PMs in the FM program would not only equip them with a set of important mentoring skills, but that, more importantly, it would in some way contribute to their more general development as mentors. In reflecting back on the project and its outcomes, it is clear that, as the designer, I have been engaged in a parallel process of becoming. Just as PMs were participants in a narrative learning experience that included tension, unexpected challenges, anticipation, and rites of passage, I have been part of a similar narrative and aesthetic experience as it relates to my development as an instructional designer. And, in the same way that reflection on experience has played a key role in moving PMs from an initial conceptual understanding of mentoring principles to more refined and embodied knowledge of these principles, evaluating and describing the design process (both in this report and in conversations that occurred across the project) has been a powerful reflective tool for my learning.

In carrying out this project, I have been living out my own narrative as an instructional designer and been an active participant in a set of practices which constitute the practice of design. However, I have also been engaged in simultaneous processes of telling and retelling

this story because I have repeatedly been asked to explain or justify the design and the critical decisions that have moved it forward. This telling and retelling has occurred in various ways as I have met with the client, sought feedback from my own mentors, and reflected on the way in which the project was unfolding in my designer's log. Additionally, one of the most powerful reflective re-tellings of the design has occurred in the writing of this report because it has required me to revisit project goals, evaluate the extent to which these goals were met, and, most importantly, articulate a coherent rationale for the key design decisions that have been made during the project.

Consequently, living out and then reflecting on this narrative, has positioned me to examine, explicate, and refine my emerging conceptual design sense. Initially, this guiding sense consisted largely of invisible and unexamined assumptions about learning and design. This hidden theoretical framework initially functioned as what has been described in instructional design literature as a "cryptotheory," in that it subtly and imperceptibly guided early design decisions for the project (Yanchar & Gabbitas, 2011, p. 386). However, through a cycle of ongoing reflection and regular attempts to articulate a rationale for the design which has resulted, the assumptions and values which have guided my work have become quite visible. Further, I have identified a core set of theories and conceptual tools which align with these values and which make up the backbone of my conceptual design sense. Shades of these perspectives—including Kolb's conception of experiential learning (1984), Schön (1983) and Moon's (1999) views on reflective practice, and Parrish's *aesthetic principles for instructional design* (2009)—were present in the unarticulated and fuzzy cryptotheory I was operating from early in the project. However, having been brought to the surface, these theories now make up

an explicit and core component of conceptual design sense which will guide my design work in the future.

Another source of learning during the project was the unexpected challenges which arose during the design process. These interruptions were critical in the refining of my design sense because, almost invariably, they forced me to examine unfamiliar theoretical frameworks in the search for solutions. These tools (e.g. van Merriënboer & Kirschner's 4CID approach to instructional design, post-then evaluation methodologies, and checklists as pedagogical tools), although not a fundamental part of my overall design sense, have become tools that can be employed in the future as called for by the demands of unique design situations I encounter. Likewise, it has become clear that there are some theoretical perspectives and tools which I am not likely to "pick up" for future designs because of their incompatibility with those views which form the basis of my conceptual design sense.

In summary, it seems that in carrying out this project I have been engaged in processes of both *being* and *becoming*. In acting as an instructional designer and seeking to fully engage in the design process, I have lived out a narrative of being. And, in the process of *being* an instructional designer I was provided with concrete design experiences and opportunities for reflection, which led me to live out a complementary narrative of *becoming.* It has been through living, telling, and re-telling these two narratives that, ultimately, I have come to understand myself as a designer. In short, this journey has led me to develop and articulate my own conceptual design sense. Further, my involvement in this project and the way in which it has shaped my professional identity, has demonstrated the importance of embracing an attitude of *critical flexibility* towards design work, by maintaining an open and reflective stance toward my

approach to designing instruction and continually striving to uncover, examine, and clarify those assumptions which guide my work (Yanchar & Gabbitas, 2011).

An awareness of the existence and interplay of these two narratives has the potential to transform the way in which designers approach their work and live out their "design lives." First, regular reflection on the ways in which a designer is transformed by her work, can provide useful insights into how similarly transformative experiences might be provided to others through designed instruction. More importantly, designers who are aware of the potential for their design experiences to change them can be more intentional in approaching each new design project as an opportunity for growth and professional development. In this way, the instructional design field can adopt a culture of continuous improvement and benefit from the innovations and improved practices which are likely to result.

Conclusion

The process of redesigning summer PM training for the FM program required an investigation of important literatures relating to skill development, reflective practice, experiential learning, peer mentoring practice, and evaluation of training programs. Additionally, it required the development of a training model which considered the resource constraints facing the FM program. As PM training continues to evolve and new methods for facilitating PM learning are developed, this project and its findings will serve as a meaningful foundation and provide a basis for future designs. More importantly, this project has been a springboard for the designer's emerging professional and artistic identity by uncovering hidden assumptions and giving clothing to a nascent conceptual design sense.

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Appendix A: Analysis of the mentoring role

1.0 Communication Skills
- 1.1 Effectively listens to others
  - 1.1.1 Focuses on the student and stops other activities
  - 1.1.2 Makes and sustains eye contact
  - 1.1.3 Uses appropriate body language (e.g. nodding, open posture)
  - 1.1.4 Allows the student to do the majority of the talking
  - 1.1.5 Uses reflective listening techniques
    - 1.1.5.1 Restates or paraphrases the student's message
    - 1.1.5.2 Asks for clarification when necessary
    - 1.1.5.3 Offers summaries after critical parts of the conversation
  - 1.1.6 Uses silence and waiting appropriately
  - 1.1.7 Responds appropriately
    - 1.1.7.1 Answers questions clearly and directly
    - 1.1.7.2 Shows empathy and understanding

- 1.2 Notices and observes verbal and non-verbal cues

  - 1.2.1 Notices verbal cues
    - 1.2.1.1 Emotion in voice
    - 1.2.1.2 Inflections & tone
    - 1.2.1.3 Colloquialisms & accent
  - 1.2.2 Observes for non-verbal cues
    - 1.2.2.1 Body movements
    - 1.2.2.2 Facial expressions
    - 1.2.2.3 Physical appearance (e.g. cleanliness, signs of fatigue, etc.)
  - 1.2.3 Effectively observes students in classroom settings
    - 1.2.3.1 Positions self in strategic way to facilitate observation
    - 1.2.3.2 Academic behaviors (e.g. note-taking, engagement w/ instructor)
    - 1.2.3.3 Interaction w/ other students
    - 1.2.3.4 Attendance and/or tardiness concerns
    - 1.2.3.5 Takes notes of important observations
  - 1.2.4 Notices/observes patterns of engagement among students
    - 1.2.4.1 Responses to email messages
    - 1.2.4.2 Attendance at NSO
    - 1.2.4.3 Class attendance & engagement
    - 1.2.4.4 Receptiveness to individual interviews

1.3 Asks effective questions
- 1.3.1 Uses questions to facilitate learning
  - 1.3.1.1 Asks reflective questions
  - 1.3.1.2 Asks questions that promote self-authorship and personal responsibility
  - 1.3.1.3 Asks questions that invite student to articulate learning
- 1.3.2 Asks open questions that facilitate dialogue
- 1.3.3 Asks questions to gather information
  - 1.3.3.1 Identifies students' interests
  - 1.3.3.2 Identifies student concerns/challenges
  - 1.3.3.3 Determines what students already know
- 1.3.4 Listens effectively for students' responses (see 1.1 above)
- 1.3.5 Avoids rapid series of questions or interrogation-like interactions

1.4 Facilitates discussions and collaborative experiences in group settings
- 1.4.1 Well prepared
- 1.4.2 Demonstrates confidence
- 1.4.3 Invites participation from all members of the group
  - 1.4.1 Works to establish a safe environment where all participants feel comfortable contributing ideas
  - 1.4.2 Ensures that conversations are not dominated by a single individual
- 1.4.4 Frames discussions and collaborative activities in ways that direct the group and contribute to cohesive dialogue
- 1.4.5 Solicits opinions/feedbacks from all group members to resolve disputes and reach consensus
- 1.4.5 Effectively summarizes discussions and highlights key ideas/principles

1.5 Initiates conversations effectively
- 1.5.1 Demonstrates appropriate levels of warmth, enthusiasm, and excitement
- 1.5.2 Strategic and intentional in initiating conversations
  - 1.5.2.1 Seeks out specific students
    - 1.5.2.1.1 Struggling students
    - 1.5.2.1.2 Isolated students
    - 1.5.2.1.3 Unknown or unresponsive students
  - 1.5.2.2 Has a purpose for initiating a conversation
    - 1.5.2.2.1 Follow up

1.5.2.2.2 Get to know student/build rapport
1.5.2.2.3 Provide critical information to student
1.5.2.2.4 Make arrangements for future interaction
1.5.2.3 Initiates conversations in timely way
1.5.2.4 Reviews notes/documentation of past interactions
1.5.3 Remembers students' names and details of past interactions
1.5.4 Respectful of students' time and makes plans to continue conversations or follow up at a later time when appropriate

2.0 Supportiveness
2.1 Takes personal interest in others
2.2 Customizes approach and remembers past interactions
2.3 Offers validation, praise, & encouragement
2.4 Proactively seeks out struggling students
2.5 Follows up on past interactions
2.6 Maintains regular and consistent contact w/ students
2.7 Promotes self-authorship & personal responsibility
2.8 Empowers students (e.g. provides opportunities for involvement/engagement)
2.9 Maintains an ongoing dialogue w/ students that stretches across interactions

3.0 Trustworthiness
3.1 Interacts w/ students in ways that leave them feeling comfortable & safe
3.2 Demonstrates reliability and dependability
3.3 Remembers details about the student & past interactions
3.4 Has academic credibility (i.e. is an excellent student and models/teaches effective academic skills)
3.5 Provides accurate information about departmental/university policies, procedures, and resources

4.0 Interdependence & Relationship Building
4.1 Connects students w/ peers
4.2 Demonstrates appropriate self-disclosure
4.3 Engages in open dialogue w/ others
4.4 Collaborates effectively w/ other program stakeholders (e.g. faculty members, T.A.'s)
4.5 Demonstrates openness to learning from others (peers, FM staff, students)
4.6 Establishes equal and reciprocal relationships w/ students
4.6.1 Avoids the "expert trap" (i.e. recognizes limits of own knowledge/experience)

- 4.6.2 Collaborates w/ students to develop solutions to challenges
- 4.7 Willing to express personal vulnerability & shortcomings
- 4.8 Develops appropriate levels of friendship w/ students
- 4.9 Maintains appropriate boundaries
  - 4.9.1 Abides by FERPA guidelines
  - 4.9.2 Abides by FM program guidelines (e.g. no dating students)
- 4.10 Connects students to university resources
- 4.11 Build relationship around shared values & goals
  - 4.11.1 Mission of BYU, Aims of a BYU Education
  - 4.11.2 Gospel principles pertaining to learning and progression

5.0 Empathy
- 5.1 Demonstrates sincere concern for the welfare of students
- 5.2 Seeks to understand situations from multiple perspectives
- 5.3 Is sensitive and alert to students' challenges/concerns
  - 5.3.1 Responds empathetically
- 5.4 Avoids making unfounded assumptions about students & is non-judgmental

6.0 Enthusiasm
- 6.1 Demonstrates excitement and passion
  - 6.1.1 Mission of BYU & Aims of a BYU Education
  - 6.1.2 General Education
  - 6.1.3 The mentoring process
- 6.2 Proactively initiates conversations
- 6.3 Demonstrates persistence and grit in the face of challenges
- 6.4 Demonstrates hope and optimism
- 6.5 Seeks to have energetic and positive interactions w/ students

7.0 Flexibility
- 7.1 Exhibits tolerance for diverse range of student goals/interests
- 7.2 Focuses on building trust and reciprocity (as opposed to focusing on overt changes in behavior)
- 7.3 Demonstrates tolerance for failure and challenges in mentoring relationships (i.e. possesses a "growth mindset")
- 7.4 Exhibits patience in interactions w/ students
- 7.5 Accepts student limitations, while still working to facilitate growth

Appendix B: Vignette #1 – Lonely and penniless during New Student Orientation

Introduction

It is the first day of Fall New Student Orientation (NSO) and you are already exhausted from being out in the hot, August sun on the campus tour (not to mention the fact that you've been in full days of peer mentor training for the last week). It has also been challenging to try to bounce back and forth between the two Y Groups for your 60 students. Even though you have sent a few emails over the last few months and heard back from quite a few of your freshmen, it's been great to finally meet them face-to-face and get to know them a little better.

Although most of your students have been fairly outgoing and seem to be connecting with their peers, during the campus tour (as well as during lunch earlier in the day) you have noticed one student who seems to keep to himself and you can't recall ever seeing him talk to any of the other students in his Y Group. You've been so busy trying to meet everyone and remember names that you haven't had a chance to talk with him yet. He seems a little isolated or discouraged and you're concerned.

Formulating the Plan

You decide that you want to try and meet the student so you can get to know him and find out how he is doing (again, you're concerned that he seems lonely). You're still on the campus tour, busy talking with the small group of students that have latched onto you and answering questions about the library (which your group just saw on the tour). But, you decide that you need to look for an opportunity to introduce yourself to the lonely student in a casual and comfortable way. You make a mental note to keep your eyes on him for the rest of the day and to look for a chance to talk with him individually. You also wonder if there might be opportunities to introduce him to others in the group or help him get connected somehow.

Seizing the Day

You're a little relieved when the tour is over because it means you might be able to get out of the sun. The next event on the NSO schedule is the Information/Service fair. You notice that the student you were concerned about is headed into the Wilkinson Student Center (WSC), so you finish your conversation with the Y Group Leaders you are working with (and decide on a place to meet later that night for Tradition of Honor) and then follow the student into the WSC. You see him walk into the WSC Terrace where the Info Fair is taking place, but lose him in the sea of students. After looking around for a few minutes, you notice him standing in front of the *Student Employment* booth and decide that now is your chance.

"Hi, I'm Dan—I think you're in my Y Group."

"Yeah, you're one of the peer mentors, right?" The student replies. "I'm Sterling, I think we emailed a little over the summer."

After hearing his name, you recall getting email messages from the student back in July. And, you remember one of the emails mentioning that he grew up on a ranch in Wyoming and that he loves working with the horses on the ranch. "Oh, right, I remember your emails. You're from Wyoming, aren't you?" He seems pretty surprised that you remember where he is from and a huge smile appears on his face. The two of you talk a little about his hometown and what the ranch was like and then you remember him telling you in an email that they had just had a new colt born, which he was pretty excited about. So, you ask, "How's that baby horse?" He bursts into an even bigger smile and the two of you talk for 10 more minutes about the horse. You're not that interested in horses, but find that as you listen to Sterling tell you about the horse and the ranch, it's easy to stay interested. You even stop him once or twice and ask questions about things you don't understand (e.g. how they separate the new horses from the rest of the herd, etc.).

The concern

Remembering that Sterling was standing in front of the Student Employment booth, you ask "So, are you looking for a job?"

The smile on his face fades quickly and he responds, "Yeah . . . school's pretty expensive."

You wait in silence for a few seconds and then Sterling continues. "I'm kind of worried about how I'm going to pay for all of this."

You wait a few more seconds and then reply "You're right, it can be tough to make ends meet sometimes. Money makes me anxious too. You know, BYU has quite a few resources to help students find money to pay for school or create a financial plan for making it through to graduation. I don't want to pry you away from the fair, but if you'd like I could sit down with you sometime in the next couple of days and we could explore some of those resources. Would that be helpful?"

"That would actually be great. I'm a little lost when it comes to this kind of thing," Sterling replies.

"I'm going to be going to Tradition of Honor with your group tonight. I think that starts at around 8:30. What if we met @ 7:45 or so in "the Hub"—the freshman space in the library that we saw on the tour earlier today? We could get online and look at some of the web resources there."

"That sounds good. I need to buy some books and get dinner sometime this afternoon, but I'm sure I'll be done by 7:45."

The meeting

You make sure you're to the lab by 7:30 in case Sterling shows up early. He walks in around 7:40 and you smile and say "Good to see you. Were you able to find your books ok?"

Looking a little exasperated, Sterling replies "Yeah, I found everything, but now I'm even more worried about money. Who knew a Biology book could cost $150."

"I hear you," you reply. "I remember feeling the same shock when I bought books for my first semester. The good news is that you can sell some of your other books back at the end of the semester."

"That's good. I'll have to keep that in mind," Sterling says.

Settling down at a computer, you motion for Sterling to come over. "So, let's talk about your plans for the semester. Like I said this afternoon, I think it might be helpful for us to look at some of the resources here on campus that you might be able to use to help you think through your finances. And, we can talk about anything else that would be helpful as well."

"Okay. This kind of caught me off guard, because I thought I was going to get a scholarship through my dad's work. But, that ended up falling through, so now my parents and I are kind of in a tough spot, because we hadn't planned as well as we should have. I could have gone to the community college in my hometown and it would have been pretty cheap, but I really wanted to come to BYU," says Sterling.

Wanting to keep him talking, you offer a brief restatement ("So, you had some other options that would have been cheaper, but coming to BYU was pretty important to you?") and then pause.

Sterling continues, "Exactly. I knew that it would be more money to come here, but I didn't want to go to just any school. I wanted BYU."

Sensing an opportunity to talk with Sterling about something a little deeper, you ask a reflective question about why he chose BYU. "I think you're right. While there are a lot of great schools out there, BYU offers some really unique things to students. I think it's great that you recognize that. So, tell me, what is it that you are hoping to get out of your BYU experience? Why BYU, rather than the local community college or any other school?"

The two of you then have a great conversation about all of the unique aspects of a BYU education, including devotionals, religion classes, the Honor Code, and the fact that students can bring together their spiritual and secular learning. Afterwards, Sterling seems much more relaxed and pretty excited about the upcoming semester.

You sense that he's ready to talk about his financial situation. "Well, let's talk about your finances. I'm no financial expert, so I probably won't have any great wisdom for you. But, what I can do is help you get connected with people on campus that can help. Let me show you the financial aid website BYU has. There are some really great tools there. . . ."

After spending ten minutes or so looking through the financial aid website, you help Sterling find their contact information so he can make an appointment to meet with a financial aid counselor. "Thanks again, for helping me with all of this," Sterling tells you. "I'm not out of the woods yet, but at least I know where I can go for help. Now, I just need to find a job."

You notice that you need to meet your Y Group to go to Tradition of Honor in about five minutes, so you say "I think we're supposed to meet our group at 8:15. Is it okay if we head over there and talk more about your job search on the way?"

"You bet. I'd like to work on campus, but I think I'd take just about anything at this point," says Sterling.

Remembering a conversation you had with another student earlier in the day, you ask "Have you met Steve yet? He's the guy in our group from Ohio . . . curly hair? He told me earlier today that he just got a job with the Grounds crew and that they were still looking for help. Maybe we could try to sit by him at Tradition of Honor and you could ask him about that."

Appendix C: Media elements list

Module #1: Growth Mindset
C1.1 Meeting Outline for Introductory/orientation Training Meeting
C1.2 Sample Letter from a Veteran to Novice Peer Mentor
C1.3 Training Blueprint – Module #1
C1.4 Learner Instructions – Module #1
C1.5 Model of Integration
C1.6 Reflection Checklist
C1.7 Practice Exercises – Module #1

Module #2: Noticing & Observing
C2.1 Training Blueprint – Module #2
C2.2 Learner Instructions – Module #2 (Part I)
C2.3 Learner Instructions – Module #2 (Part II)
C2.4 Noticing & Observing Checklist
C2.5 Practice Exercises – Module #2

Module #3: Listening
C3.1 Training Blueprint – Module #3
C3.2 Learner Instructions – Module #3
C3.3 Listening Checklist
C3.4 Peer Evaluation Form – Listening
C3.5 Practice Exercises – Module #3

Module #4: Asking Questions
C4.1 Training Blueprint – Module #4
C4.2 Learner Instructions – Module #4
C4.3 Asking Questions Checklist
C4.4 Model of Reflection Checklist
C4.5 Open-Ended Questions Checklist
C4.6 Practice Exercises – Module #4

Module #5: Recognizing & Celebrating Growth
C5.1 Learner Instructions – Module #5
C5.2 Instructions for Video Analysis Part II

Fall Training Materials (Module #6: Initiating Conversations)
C6.1 Presenters Guide for Day 1: Building rapport & establishing connections
C6.2 PPT Slides for Day 1
C6.3 Toolkit Handout (Day 1)
C6.4 Presenters Guide for Day 2: Informal conversations
C6.5 Toolkit Handout (Day 2)
C6.6 Presenters Guide for Day 3: Formal Conversations
C6.7 PPT Slides for Day 3

C6.8 Presenters Guide for Day 4: New Student Orientation conversations
C6.9 PPT Slides for Day 4

Pre-Assessment Materials (Instructions & resources for recorded mentoring role plays)
C7.1 Instructions for "actors" (i.e. student profile, description of scenario, & script)
C7.2 Scenario description for mentors
C7.3 Role play site preparation checklist

C1.1 Outline for June 16th PM meeting (Orientation to Summer Training)

11:00 Announcements

11:05 Summer Training

- Review instructions/tasks for next two weeks
  - Questionnaire
  - Role Plays (by Monday afternoon)
  - Watch your email for instructions for next week (check email daily)

- Start w/ slide – "Learning is always a perilous undertaking"
  - Agree or disagree? Why?
- We're all embarking on a journey—one we hope will lead to learning
  - Staff are learning – we're doing some things we've never done before
  - You will have opportunities to learn -- Growth & development
    - Focus: Strengthening core mentoring skills
  - Summer is a great time to do some focused learning
    - Good warm up
    - Authentic context to practice skills
    - Can learn from one another

- Like any good journey, there are risks and dangers
  - "Learning is always a perilous undertaking," (Patrick Parrish)
    - Requires us to change
    - Have to confront struggles, inadequacies, & fears
    - Allow yourself to be vulnerable & live in that space
      - Getting out of comfort zone
      - Welcoming Correction
      - Being willing to change

- But, the rewards are great
  - Not only will you head into Fall semester with strengthened abilities, you'll experience transformative growth that will make a difference in the future
  - And, you're becoming part of something bigger than yourself
    - New: Joining a mentoring family
    - Returning: Renewing commitment to be part of this thing we call Freshman Mentoring
  - Give out letters

C1.2 Sample Letter from a Veteran to a Novice Peer Mentor

Dear Peer Mentor,

Welcome to the team! I am so happy to have you and to have the chance to be able to work with you. Freshman Mentoring is a place where you can make a difference in others and in yourself. This is an opportunity to seize the day. You get to work with amazing co-workers, faculty and students who will amaze and inspire you. Each semester is a new and different experience and over the span of semesters that I have mentored I have been impacted in new ways. I love to fill my notebook with quotes and pass them along to my students, and this opportunity has given me a chance to share one with you. President Monson said, “Along your pathway of life you will observe that you are not the only traveler. There are others who need your help. There are feet to steady, hands to grasp, and minds to encourage, hearts to inspire, and souls to save.” As a peer mentor your job is to do that is a very real way.

One lesson that I learned not too long ago was that though the opportunities that President Monson listed are available they are not all as readily available. Often, you have to go out of your way to get the most out of experiences. Our job is all about being optimistic and looking for ways to improve. One of my personal goals as a peer mentor is to empower students. I had a student that I knew had struggled in her past term and I knew going into the semester that I wanted to make a difference, I was going to be her aid. I was going to open her eyes to the wonderful nature of education and learning. It turns out she was not really interested in being helped. After the first day of classes I did not see or hear from her again. As the semester continued I started to get desperate! How was I supposed to help this student if she stopped coming to class. I had to go to new lengths. I had to gather up the courage to go to her dorm room and try and contact her; I left numerous messages, and set many emails, but to no avail. My student never came around that semester and I was heartbroken. I struggled with doubts of being a good peer mentor and finding the line between the students’ agency and my efforts to go the extra mile. I felt like I could have always done more. I talked with other peer mentors about doing our best compared to the good and the better from Elder Oaks talk. In my eyes I had failed, but in the long run maybe I didn’t, I will never really know. That is how it usually is; you never know the impact that you have on your students. I am here to tell you, you have an impact. The days and moments that I struggled with coming to terms that I had done my best I looked to my co-workers. I was supported and uplifted by my fellow peer mentors; they steadied my feet, grasped my hand, encouraged and inspired me.

At the beginning, middle, and end of the semester you will have days, maybe even weeks that are challenging. You are surrounded by peer mentors who care about you and have the same goals as you. Lean on and support each other. You may question why you chose to be a peer mentor, but I can testify that peer mentoring can make a difference in your life. Reflecting on my experience with my student I have realized I was stretched and made into the peer mentor I am today. I am grateful for the experience and for the future challenges that I will face. I hope you will have successful relationships and difficult ones to, to teach you. Hold on tight because you are in for a ride!

I wish you the best, and I am here to support you,

Brooke

C1.3 Training Blueprint – Module #1

Module #1: Growth Mindset

Readings (Supportive Information)

- "Inside the Mindsets," *Mindset*, Carol Dweck
- The Freshman Mentoring Reflection Model
- "On Learning and Becoming," Dallin H. Oaks
- "The Power of Vulnerability," Brene Brown
- "Are you willing to change?" Allie Hunt

Learning Tasks/Exercises

- Written reflection

Checklists (Procedural Information)

- Model of Integration
- Reflection Checklist

Practice Exercises (Part-Task Practice)

- Responding to student statements in a way that supports a growth mindset

C1.4 Learner Instructions – Module #1

Summer Training

Module #1: Vulnerability & the Growth Mindset
(June 20 – 27)
Due June 27th

Objectives

This introductory module will provide you with the opportunity to reflect on your attitude towards learning and growth and what implications these personal beliefs might have for your mentoring work.

Overview

This module will consist of readings/video segments and a short reflective assignment. The readings and video segments are intended to familiarize you with the concept of a "growth mindset" and to help guide your thinking as you consider how your own mindset might impact (a) your personal growth and (b) your interactions with freshmen students. We have also provided a few helpful checklists and models that you may refer to. After completing the readings and reviewing the checklists, you will have the opportunity to pull together your learning (i.e. new ideas that have emerged, questions that the reading raised for you, etc.) in a written reflection.

Readings

The following readings will help to deepen your thinking about growth and change. As you read, be sure to jot down notes about what you are learning (e.g. new ideas, questions, connections to other things you have read, etc.). Not only will this help you be more active and focused in your reading, the notes will be helpful to you when you write your reflection. For this module, there are two "required" readings, as well as optional supplemental readings you may choose to explore. You can find the readings in the "Readings" folder for this module.

Required readings

- Mindset – Ch. 2 ("Inside the Mindsets)*
- The Reflection Model

* If you have read Ch. 2 of Mindset before, please watch the Brene Brown TED Talk instead (note: there is some mild language in the talk, if this might be offensive to you, you are welcome to re-read Mindset)

Supplemental readings

- "On learning and becoming," Dallin H. Oaks
- Allie Hunt's Change Video

Additional resources to support thinking

- Model of Integration
- Reflection Checklist

Glass Room Practice Exercises (for those working in the office during summer term)

If you will be working in the office during summer term, watch the whiteboard in the glass room for simple practice exercises that you can complete this week.

Written reflection

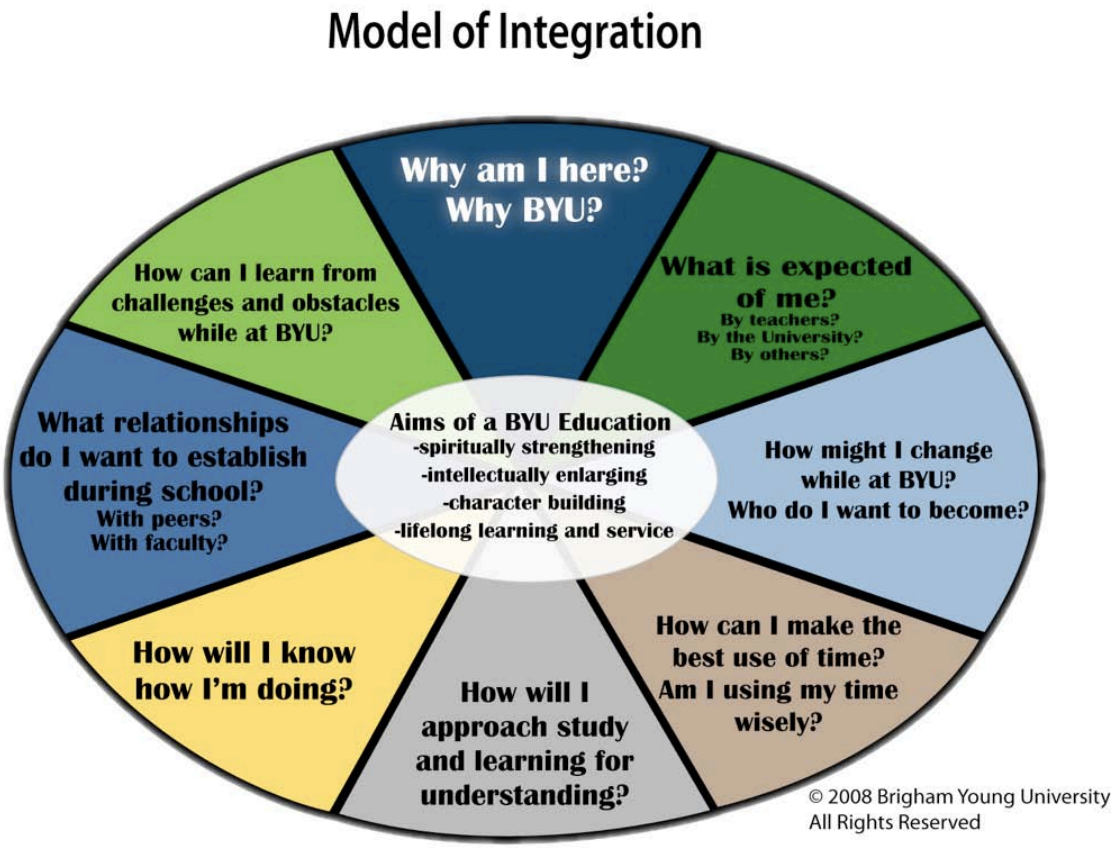
Throughout the summer you will have opportunities to participate in reflective writing activities. Our hope is that by engaging in these focused reflections, you can make meaningful connections between ideas from your reading and the personal experiences you are having (particularly with freshmen students participating in our summer term program). Ultimately, we hope that these reflections help you evaluate your skill development and understand how what you are learning can impact your work with freshmen students.

For this reflection, please write a personal response that synthesizes your readings, conversations with other peer mentors, and relevant personal experiences. Listed below are some questions that can stimulate your thinking; however, this is not a list of questions that needs to be answered sequentially (the questions are just here to jumpstart your writing):

- When, in the past, have you embraced a "growth mindset?" What was the outcome? How was this experience different from times when you had a "fixed mindset?"
- What would it mean (or what might it look like) to bring a growth mindset to the mentoring role? How would it impact interactions with students? How might it impact your development as a mentor?
- In what ways might you embrace vulnerability this summer? How might allowing yourself to feel vulnerable impact your personal learning and skill development?

Deadline: June 27th

C1.5 Model of Integration



C1.6 Reflection checklist

Reflection Model Checklist

- ☐ Did I use personal voice, rather than dispassionate, clinical observation?
- ☐ Did I provide personal experience clarified by details, cases and examples from that experience within a particular context?
- ☐ Did I reveal my affect or emotional response to the experience or my understanding of it.
- ☐ Did I make connections to idea utilizing an an intellectual component which was revealed by my use of the vocabulary and ideas of theory, reading or Peer Mentor training.
- ☐ Did I talk about new issues that emerged from the analysis of experience and ask questions to drive my future learning?

C1.7 Practice Exercises – Module #1

Practice Exercises
Module #1: Mindset

How would a peer mentor with a "Growth Mindset" respond to the following student statements:

"I just failed my test. I'm not sure I can make it in American Heritage."
"I got my draft back from the professor and there were red marks all over it."
"I'm really shy. I'm not sure I can make any new friends this semester."
"If I ask the TA for help, he'll think I'm dumb."

Take a few minutes (no more than 5) and practice with a partner. If you aren't familiar with the idea of a "Growth Mindset," do the reading for Module #1!

C2.1 Training Blueprint – Module #2

Training Blueprint
Module #2: Noticing & Observing

Readings (Supportive Information)

- "Quick to Observe," David A. Bednar
- "The Anthropologist," *The Ten Faces of Innovation*, Tom Kelley

Learning Tasks/Exercises

- Student Observations (in class, in conversation w/ a peer, during a conversation w/ peer mentor)
- Viewing of model mentoring performance
- Self-analysis of simulated mentoring performance
- Written reflection

Checklists (Procedural Information)

- Noticing & Observing Checklist

Practice Exercises (Part-Task Practice)

- Observe another peer mentor or staff member
- Self evaluation of noticing/observing ability using the Noticing & Observing Checklist

C2.2 Learner Instructions – Module #2 (Part I)

Summer Training

Module #2: Noticing & Observing
(June 27 – July 11)
Due July 11th

Objectives

In this module, we will be focusing on refining the skills of **Noticing & Observing.** Our hope is that you will strengthen your ability to observe both yourself and others. During this module you will have the opportunity to observe and reflect on mentoring performances (your own plus a model or two), observe your summer term students (if you are on campus working during summer term), and then reflect on what it means to notice and observe and how well

Overview

This two-week module will consist of readings, observations and analysis of recorded mentoring performances, student observations, and a reflective writing assignment. Part 1 of the module will include readings on observing and noticing and learning exercises to strengthen your observational skills. In Part 2 of the module, you will have the opportunity to analyze recorded mentoring performances and then complete a written reflection describing what you have learned during the module. Like the first summer module, we have also provided you with checklists to guide your thinking.

Part I: Readings & Learning Exercises

Readings

The readings for this module should help you consider what it means to notice and observe and begin to think about how you would like to grow in this area. Just like before, as you read, be sure to jot down notes about what you are learning (e.g. new ideas, questions, connections to other things you have read, etc.). For this module, there is one required reading as well as an optional reading, both of which are located in "Readings" folder for this module.

- "Quick to Observe," David A. Bednar **[Required]**
- "The Anthropologist," Tom Kelley **[Optional]**

* If you have read "Quick to Observe" previously, please complete the optional reading.

Learning Exercises

The learning exercises in this module are intended to provide you with opportunities to observe both yourself and others and then to reflect on what you can learn by regularly engaging in observation.

Part 1: Student Observations
(Note: You'll receive instructions for Part 2 later this week)

For this exercise you will be observing students in three settings: in class, in conversation with their peers, and in a conversation with you.

1. Review the "Noticing & Observing Checklist" located in the "Skill Development Checklists" folder.
2. Then, during the next two weeks, use the checklist to guide your observations in the following situations
    a. **In class:** Select one of your students to observe for a single class session. Take notes or make a written record of your observations. Pay particular attention to the academic behaviors noted on the checklist.
    b. **Conversation w/ a peer:** Select another student and observe them in an interaction with one of their peers (this could happen before or after class, or any other time you see your students interacting with each other). Again, use the checklist to guide your observations and to make notes.
    c. **In a conversation w/ you**: Select another student (different from the previous two) and initiate a conversation with them. During this conversation, observe their reactions to you (e.g. body language, openness, verbal cues, etc.). After the conversation, use the checklist to make a few notes about what you observed
    *(Note: If you are at home for the summer and not working with students, please observe another college-age student in at least two of the three settings mentioned above)
3. Choose one of the above interactions and write a <u>brief</u> reflection (a few paragraphs will be plenty) about what you learned about the student by closing observing them. For example, what did you learn about their personality based on your observations? What insights did you gain that, as their peer mentor, can help you?
4. Post this reflection to the Dropbox for Part 1

<u>Glass Room Practice Exercises</u> (for those working in the office during summer term)

Be sure to watch the whiteboard again this week for the practice exercises that will be posted.

C2.3 Learner Instructions – Module #2 (Part II)

Instructions for Video Analysis

Part 2: Analysis of Recorded mentoring performance **(Note: If you are not working w/ students during summer term, just complete #'s 1 & 4 below)**

1. Review the checklists (Noticing & Observing, Listening, & Asking Questions) in the "Skill Development Checklists" folder.

2. Watch and analyze a model performance **(you'll have until Tuesday, July 2nd to do this)**
   a. Go to "react.byu.edu" and log in using your netid and password
   b. Click on the "View/Edit Feedback" tab at the top of the page
   c. Click on "View Another Presentation"
      *At this point you should see a menu with three presentations (two "model" role-plays by coordinating peer mentors, plus your own recording). **Please don't watch yourself yet**.
   d. View one of the "model" conversations (i.e. one of the two recordings that you didn't participate in). As you watch, use the checklists in the "Skill Development Checklists" folder to guide your observations. Jot down notes of the things you see the peer mentor do well.

3. Watch and analyze your own performance **(you won't be able to do this until Tuesday, July 2nd)**
   a. Select your own recording from the menu of presentations.
   b. As you watch yourself, look for the things you are doing well. Specifically, watch for times when you effectively demonstrate the following skills:
      - Noticing & observing
      - Listening
      - Asking Questions
   c. Each time you see one of these skills demonstrated, use the commenting tool to "tag" the recording. This will mark the spot in the recording where you have seen yourself doing something well.
   d. Enter a comment for each "tagged" spot of the recording. Your comment should include the following elements (in this order):
      - A "code" indicating the skill you saw demonstrated
        - N = Noticing & observing
        - L = Listening
        - Q = Asking Questions
      - Brief comments on why this is a good example of the particular skill
   e. Also look for "missed opportunities" where you wish you would have done something different.

- Tag these sections with the code “M” and enter comments (as described above). Your comments should briefly describe why this was a missed opportunity and what you would do differently if in the same situation again.

4. Write a concluding reflection for this module

For this reflection, please write a personal response that brings together what you have learned from your readings, learning exercises (i.e. student observations & video analysis), and use of the checklists. Listed below are some questions that can get you thinking. But, like before, please don’t treat this as a list of questions that must be answered in sequence (in fact, you probably won’t even address all of them).

- What does it mean to effectively “notice and observe?” How would you define or describe this skill? In other words, what does it “look like” when someone notices & observes skillfully?
- At what point during the last two weeks have you noticed & observed well? What difference did it make in your mentoring or your ability to mentor in the future?
- What did you notice about yourself as you watched your recorded mentoring role play? How was your performance like or unlike the model you watched? What skills would you like to focus on strengthening during the next few weeks?

Deadline: July 11th

C2.4 Noticing & Observing Checklist

CHECKLIST: NOTICING AND OBSERVING

In my mentoring work, do I . . .

- ☐ Notice verbal cues
  - ☐ Emotion
  - ☐ Inflections & tone
  - ☐ Colloquialisms, slang, or accents
  - ☐ Word usage/choice

- ☐ Notice non-verbal cues
  - ☐ Body movements (e.g. nervous movements, gestures, etc.)
  - ☐ Body language (e.g. eye contact, posture, etc.)
  - ☐ Facial Expressions (e.g. open/closed, emotional expressions, etc.)
  - ☐ Physical Appearance (e.g. cleanliness, clothing, signs of fatigue, etc.)

- ☐ Observe academic behaviors in the classroom
  - ☐ Note-taking
  - ☐ Attentiveness to lecture
  - ☐ Class attendance
  - ☐ Class participation

- ☐ Notice levels of engagement and social interactions
  - ☐ Willingness to initiate interactions or conversations w/ others
  - ☐ Level of comfort (i.e. Relaxed vs. tense/anxious)
  - ☐ Level of engagement in conversations (e.g. listening, watching, etc. vs. distant or distracted)

C2.5 Practice Exercises – Module #2

Practice Exercises for Week 1 of Module #2

- Find a partner
- Together, choose a peer mentor (or staff member) to observe for 2 – 3 minutes. Use the noticing & observing checklist to guide your observations.
- After your observation talk together about what conclusions you might draw from your observations (e.g. is the peer mentor stressed? relaxed?). What did you notice about their body language? Tone? Etc.

  *Please do not spend more than 10 minutes on this task

Practice Exercises for Week 2 of Module #2

- Think about your interactions with your students over the last week or so. Using the "Noticing & Observing" checklist (there are blank copies on the bookcase just below this whiteboard), mark the things that you feel you have consistently noticed or observed. On the back of the checklist, jot down a few notes about your current skill level in this area (e.g. what do you do well, how would you like to improve).
  *Please do not spend more than 10 minutes on this task

- Take this completed checklist to your next meeting with your supervisor or coordinating peer mentor and talk together about your noticing & observing skills (e.g. what you do well, what you would like to pay more attention to in the future, etc.)

C3.1 Training Blueprint – Module #3

Training Blueprint
Module #3: Listening

Readings (Supportive Information)

- "Active Listening," Kathryn Robertson, *Australian Family Physician*
- "Listening Reflectively," William Miller & Stephen Rollnick, *Motivational Interviewing*
- "Listening," *Teaching, No Greater Call*
- *Listening is an Act of Love*, Dave Isay & the Storycorps Project

Learning Tasks/Exercises

- Online listening tutorials (University of Manchester)
- Focused listening during interactions w/ students
- Written reflection

Checklists (Procedural Information)

- Listening Checklist

Practice Exercises (Part-Task Practice)

- "Listen" to another peer mentor tell you about their academic plans for the fall semester. Continue the conversation for at least 5 minutes, using only active listening techniques
- Self evaluation of listening ability using the Listening Checklist

C3.2 Learner Instructions – Module #3

Summer Training

Module #3: Listening
(July 11 - 25)
Due July 25th

Objectives

In this module, we will be focusing on and practicing the skill of **Listening.** In some sense, listening is an extension of the skill of noticing & observing because it is another way of gathering information. Additionally, listening is one of the most important tools for building relationships. Ultimately, we hope that the exercises in this module help you to (a) reconsider what it means to listen and (b) introduce you to effective listening strategies that you can implement in your work with students.

Overview

During this two-week module you will have the opportunity to read about the skill of listening, complete a short online tutorial, participate in a few simple listening exercises, and write a summative reflection. You may also find it helpful to begin by reviewing the "Listening" checklist that is posted in BrainHoney.

Readings

The readings for this module should help you consider what it means to listen (e.g. that it's more than just paying attention) and begin to think about how practicing good listening habits can improve your abilities to connect with and support students. As always, be an active reader and make notes of your insights and questions. For this module, there are two short required readings, as well as two optional readings.

- "Active listening: More than just paying attention," Kathryn Robertson **[Required]**
- "Listen Reflectively," from *Motivational Interviewing* **[Required]**
- "Listening," from *Teaching, No Greater Call* **[Optional]**
- Video clips from the *Storycorps* website **[Optional]**
    - Listen to 2 – 3 of the stories posted on the site and consider how *listening* builds and strengthens interpersonal bonds
    - You might also want to watch the 2 videos posted on the "About Us" page to learn more about the Storycorps project

Learning Exercises

The learning exercises in this module include (a) an online listening tutorial, where you can evaluate your own listening skills, (b) a few simple listening exercises you can perform during the week as you interact with your students, and (c) a reflection designed to help you tie together your learning for the week.

Exercise #1: Online Tutorial

(a) Follow this link to access the University of Manchester's "Listening and Interpersonal Skills" tutorial page.

(b) Complete the following tutorials

- "Becoming an effective listener"
- "Reading non-verbal communication"

(c) As you complete the self-assessments, identify those areas that you would like to focus on over the next few weeks (e.g. reflective listening techniques, avoiding distractions, etc.)

Exercise #2: Practice Listening during Interactions w/ Students **(Please complete this exercise by Thursday, July 21st)**

(a) Review the "Listening" checklist posted in BrainHoney. Consider your current listening abilities and then identify two of the areas on the checklist (e.g. "Use silence appropriately," or "Use reflective listening techniques appropriately") to focus on during this module.

(b) Look over your plans for the next two weeks and identify two opportunities (e.g. an interview with a student, a meeting w/ a faculty member, a lunch conversation with your students, etc.) where you will have the opportunity to practice the listening skills/behaviors you identified above.

*[Note: If you aren't working with students during summer term, identify two opportunities you might have to listen to siblings, classmates, coworkers, etc.]

(c) Prior to each interaction, review the "Listening" checklist to remind yourself of the skills you want to practice. Then, look for opportunities during that interaction to practice these skills.

(d) After each interaction, make a few notes about how things went and then post them to BrainHoney in the "Listening Notes" dropbox [save these notes because you'll want them for the reflection]. **Please complete this part of the module by Thurs., July 21st:**

- What did you do well? Which behaviors on the checklist did you engage in?
- What was the most difficult part of listening during the interaction? What were the challenges to listening that you noticed?
- What could you focus on during your next listening opportunity?

Exercise #3: Write a summative reflection for this module

Write reflectively in a way that connects your learning across the various activities for this module (i.e. readings, tutorials, practice exercises, etc.). You can use the questions below to jumpstart your thinking:

- How has your perspective on what it means to "listen" evolved over the last two weeks (i.e. what did you believe about listening two weeks ago? How about now?) What experiences or ideas led to these changes in thinking?
- How have you seen effective listening impact the relationships you have with students? What particular listening behaviors have been helpful?
- What goals for improving as a listener have you made after participating in this module? What opportunities to practice listening might you have for the remainder of the summer (either with your students, or at home with others you might interact with)?
- What connections do you see between the skills of noticing/observing & listening? How do they complement one another?

<u>Glass Room Practice Exercises</u> (for those working in the office during summer term)

Be sure to watch the whiteboard again this week for the practice exercises that will be posted.

Deadline: Monday, July 25th

C3.3 Listening Checklist

CHECKLIST: LISTENING

In my mentoring work, do I . . .

- ☐ Focus on the student and stop anything else I am doing
  - ☐ Avoid distractions (e.g. turn off or silence cell phone, close email, etc.)
  - ☐ When taking notes, keep them simple & brief, to stay focused on the student
  - ☐ Emotionally present (i.e. not thinking about other things, unrelated to the student)
  - ☐ Demonstrate sincere concern, empathy, and interest

- ☐ Listen with my whole body
  - ☐ Make eye contact
  - ☐ Lean in towards the student
  - ☐ Open and receptive posture (i.e. uncrossed arms/legs, face student)
  - ☐ Nods, facial expressions, gestures to communicate understanding

- ☐ Let the student do the majority of the talking
  - ☐ No interruptions or unsolicited opinions
  - ☐ Student directs the conversation
  - ☐ Avoid playing the "expert" (e.g. excessive suggestions, advice, etc.)

- ☐ Use reflective listening techniques
  - ☐ Restatements, paraphrasing, summaries, etc.
  - ☐ Validations of student ideas, thoughts, concerns, etc.
  - ☐ Occasional questions to gather clarifying information

- ☐ Use silence appropriately
  - ☐ Allow student to fully articulate or express thoughts/feelings
  - ☐ Use periods of "waiting" or verbal such as "and" to prompt additional dialogue
  - ☐ Maintain eye contact
  - ☐ Keep pleasant, attentive expression

C3.4 Peer Evaluation Form – Listening

Did I . . . .

- ✓ **Focus on the student and stop anything else I am doing?**

  1 2 3 4 5
  Rarely Consistently

- ✓ **Listen with my whole body (eyes, hands, body positioning)?**

  1 2 3 4 5
  Rarely Consistently

- ✓ **Let the student do the majority of the talking?**

  1 2 3 4 5
  Rarely Consistently

- ✓ **Use reflective listening techniques (restating, paraphrasing, summarizing, etc.)?**

  1 2 3 4 5
  Rarely Consistently

- ✓ **Use silence appropriately?**

  1 2 3 4 5
  Rarely Consistently

C3.5 Practice Exercises – Module #3

Practice Exercises for Week 1 of Module #3

- Find a partner
- Ask them to tell you about their plans for fall semester (e.g. what classes they are taking, where they are going to be living, etc.)
- Keep the conversation going for at least 5 minutes, using active listening techniques:
    - Restatements, paraphrasing, summary statements
    - Validations
    - Verbal cues like “and” or “tell me more about that.”

  **No questions!

Practice Exercises for Week 2 of Module #3

- Review the listening checklist
- Find a partner
- Pick one of the following scenarios to role play
    - Student who struggled on 1st exam
    - Student feeling lonely & isolated
    - Student sleeping through morning classes
    - Student who wants to withdraw
    - Student feeling stressed or overwhelmed
- Role play a 5 minute conversation & focus on practicing the behaviors on the checklist
- Have your partner rate you using the sheet below & discuss together what you did well & what you could focus on next time.

  Do this exercise with two different partners during the week

C4.1 Training Blueprint – Module #4

Training Blueprint
Module #4: Asking Questions

Readings (Supportive Information)

- "Toward reflective conversations: An advising approach that promotes self-authorship"
- "Responding to the Lord's Questions," John Tanner
- "Open Questions," from *Motivational Interviewing* (pp. 65 – 67, 140 – 143)
- "How to ask better questions," Harvard Business Review, 6 May 2009
- "Questioning," Online tutorial from the University of Leeds

Learning Tasks/Exercises

- Use the readings, checklists, & handouts to prepare questions you can use in two conversations w/ students: (1) a conversation w/ a student you don't know well and with whom you would like to build rapport; (2) a student with whom you already have a relationship and who you would like to help reflect on their summer term experience.
- Written reflection

Checklists (Procedural Information)

- "Asking Questions" checklist
- Model of Reflection checklist
- Open ended & Probing Questions checklist

Practice Exercises (Part-Task Practice)

- Invite another peer mentor to tell you about what they have learned during summer training thus far. Use as many open-ended questions as possible in this 5 minute conversation.

C4.2 Learner Instructions – Module #4

Summer Training

Module #4: Asking Questions
(July 25th – August 8th)
Due August 8th

Objectives

In this module, we will be exploring the skill of **Asking Questions.** We hope that our emphasis over the last month on noticing & observing and listening have prepared you to be more thoughtful about asking questions and that you'll see meaningful connections between these three skills. During this module we hope you'll consider the types of questions you ask, when and how you ask them, and most importantly, how the questions you ask can help students reflect on their experiences and take responsibility for their own learning.

Overview

This module includes two required readings as well as a number of optional readings. You will also have the opportunity to practice using questions to get to know students and help them reflect on their experiences. As with each of the modules this summer, you'll finish by writing a reflection that connects your reading, practice experiences, and personal insights. This writing is an important part of your learning and can help solidify the insights and ideas you have had throughout the module.

Readings

The readings for this module are intended to help you consider how you can use questions more effectively to facilitate dialogue, promote reflection, and build relationships. Obviously, you have been asking questions all of your lives; however, we are not always as thoughtful and intentional as we could be in the questions we ask of those we mentor. Additionally, effective questions can protect against the tendency we sometimes have to give unwanted advice, suggestions, or solutions to students. For this module, there are two short required readings, as well as three optional readings. We encourage you to read at least one of the optional readings.

- "Toward reflective conversations," Marcia Baxter-Magolda & Patricia King **[Required]**
- "Responding to the Lord's questions," John S. Tanner **[Required]**
- "Open questions" from *Motivational Interviewing* **[Optional]**
- "How to ask better questions," Harvard Business Review **[Optional]**
- "Questioning" (Online Tutorial from the University of Leeds, UK) **[Optional]**

Learning Exercises

The learning exercises in this module will invite you to make plans to use questions in two different types of conversations, and then to practice asking questions in these situations. Afterwards, you will be invited to write reflectively about the learning you have experienced during this module.

Exercise #1: Using questions strategically

*Note: If you are not able to have conversations with students, adapt these learning exercises to your own situation.

(a) Make sure you have read the "Toward reflective questions" article, then review the "Asking Questions" checklist and "Open-ended & Probing Questions" handout distributed by Pat in peer mentor meeting on July 14 (all are posted in BrainHoney). Please don't move on until you have completed these tasks.

(b) Use the resources above to prepare a set of questions you can use in the following situations

- *A conversation w/ a student you do not know well*
    - i.e. questions you can use to get to know the student and build rapport
- *A reflective conversation with a student who you already have a relationship with*
    - These questions should be designed to help the student reflect on and make meaning from their experiences
    - e.g. "Tell me about how you felt the GEOG 120 exam went. What did you learn about preparing for the next exam?"

(c) Identify two of your students who you want to initiate these types of conversations with (i.e. one who you would like to get to know better and another who you would like to follow up with).

(d) Initiate a conversation with these students and look for opportunities to use the questions you have prepared (or any others that come to mind during the conversation).

(e) After each conversation, make a few notes about what you observed and how you felt about your use of questions and then post them to BrainHoney in the "Notes on Asking Questions" dropbox. **Please complete this learning exercise by of the module by Thurs., August 4th:**

- Which questions were most effective? Which questions were not useful? Why?
- What was most challenging about asking effective questions?
- How did your questions differ across the two settings (i.e. getting to know student vs. promoting reflection)? In what other types of interactions could you use questions?

Exercise #2: Written reflection using the Freshman Mentoring Reflection Model

(a) Review the basic elements of the "Reflection Model" (the model is posted in this module on BrainHoney).

(b) Write a written reflection that articulates what you have learned during this module. Be sure that you pay close attention to the reflection model and incorporate its elements. For example, your reflection should make clear connections to the readings for this module (or other readings you have done as part of your training), include references to personal experiences that have contributed to your learning, and mention new questions that have come up for you during the module. You can use the questions below to jumpstart your thinking:

- What role can questions play in mentoring? What makes an effective question? Are there pitfalls or dangers to be aware of when asking questions in mentoring relationships?
- How can questions strengthen mentoring relationships?
- What did you notice about your ability to ask questions in mentoring settings? How would you like to improve in the coming months?
- How are the skills of noticing/observing, listening, and asking questions related to one another?

Glass Room Practice Exercises (for those working in the office during summer term)

Be sure to watch the whiteboard again this week for the practice exercises that will be posted.

Deadline: Monday, August 8th

C4.3 Asking Questions Checklist

CHECKLIST: ASKING QUESTIONS

In my mentoring work, do I . . .

- ☐ Ask questions in appropriate and natural ways
  - ☐ Balance type & number of questions asked
  - ☐ Provide adequate time to respond (using silence, waiting, etc.)
  - ☐ Use questions to convey sense of interest or concern for the student
  - ☐ Avoid overly personal, inappropriate, or ill-timed questions

- ☐ Ask questions that gather information and lead to understanding
  - ☐ Determine students' interests, needs, concerns, challenges, etc.
  - ☐ Check for students' current level of understanding

- ☐ Use questions to promote learning & reflection
  - ☐ Reflective questions
  - ☐ Questions that promote personal responsibility & self-authorship
  - ☐ Questions that allow students to make meaning or articulate what they are learning
  - ☐ Questions that move students past superficial responses

C4.4 Model of Reflection Checklist

Reflection Model Checklist

- ☐ Did I use personal voice, rather than dispassionate, clinical observation?
- ☐ Did I provide personal experience clarified by details, cases and examples from that experience within a particular context?
- ☐ Did I reveal my affect or emotional response to the experience or my understanding of it.
- ☐ Did I make connections to idea utilizing an an intellectual component which was revealed by my use of the vocabulary and ideas of theory, reading or Peer Mentor training.
- ☐ Did I talk about new issues that emerged from the analysis of experience and ask questions to drive my future learning?

C4.5 Open-Ended Questions Checklist

Open-ended question stems

- *What would happen if . . .*
- *I wonder . . .*
- *What do you suppose . . .*
- *In what way . . .*
- *How did that happen . . .*
- *What do you think . . .*
- *Help me understand . . .*
- *What would you do . . .*
- *How can we . . .*
- *How did you . . .*
- *Tell me about . . .*
- *Tell me more . . .*
- *What are your thoughts about . . .*
- *Have you considered . . .*
- *What have you learned . . .*
- *What do you hope . . .*
- *What is going well . . .*
- *What would you like to change . . .*
- *What's been your thinking about . . .*
- *How do you plan . . .*

C4.6 Practice Exercises – Module #4

Practice Exercises for Week 1 of Module #4

- Find a partner
- Ask them to tell you about what they have learned this summer about mentoring.
- During your conversation (about 5 minutes), try to use as many open-ended questions as possible (i.e. questions like those that appear on the handouts below). Minimum = 3 open ended questions during the 5 minute conversation
- Repeat this exercise with a different partner, but this time focus on asking "Probing Questions" (you can use the handout for ideas)

  **Remember to listen!

Practice Exercises for Week 2 of Module #4

- Find a partner
- Ask them to tell you about the challenges that might come with being a mentor during the fall semester.
- During your conversation (at least 5 minutes), attempt to do all of the following
  - Ask questions that
    - Gather information or check understanding
    - Demonstrate your interest or concern
    - Promote self-authorship or personal responsibility
  - Ask at least 2 "open questions" (see handout)
  - Ask at least 1 "probing question"
  - Use silence
- After you have both had a chance to practice, use the "Asking Questions" checklist to identify which items on the checklist you can "check off."
- Repeat this exercise with a different partner another time this week.

C5.1 Learner Instructions – Module #5

Final Module: Recognizing & Celebrating Growth

Over the last few months as you have completed the spring tasks and summer modules, you have encountered new ideas, faced unique challenges, and had opportunities for growth. During these times of learning we often focus only on the ways we need to change; however, it is also important to pause occasionally and recognize the growth we have experienced. As summer training comes to close, we have a great opportunity to take stock of how we have grown and changed and to celebrate our learning.

Consequently, your final "summer training" task is one that will give you the opportunity to review your past reflections and look for evidence of your own growth. This process should help you identify how your behaviors or approach to mentoring have evolved, how your perceptions have changed, and what new lessons you have learned. In addition to the exercise that is outlined below, we will spend the first day of fall training sharing and celebrating the learning and growth we have all experienced. So, come prepared to discuss your thoughts!

In preparation for this portion of fall training, please do the following and bring your completed work with you on the first day of training (Aug. 17th).

Instructions

1. Print out your BrainHoney responses for each of the spring tasks and summer modules you have completed (for summer modules, just print out your reflections—you don't need to print the "notes" you submitted).

2. As you read back over your printed reflections, look for indications, evidence, or signs of your growth or learning. Below is a list of areas in which you might notice growth or change. Select a few to focus on while you review your reflections, then mark, highlight, or otherwise indicate where these ideas or traits are present.

- Things you have learned
- Goals you have made
- Freshman Mentoring way traits
    - Relationships always come first
    - Growth and progression are eternal

    - Self-assessment and reflection lead to growth
    - Persistence, effort, and grit triumph all other qualities
    - Follow procedures
- New questions and struggles
- How you have changed as a person
- New ideas and insights
- New behaviors you want to use with your students
- Mentoring insights
- Connections to other reflections and ideas

3. Once you have finished marking your reflections, look back over everything you have read and consider the question: ***How have I changed and grown during spring and summer through the training modules and other mentoring experiences?***

Then, identify any trends or patterns of growth you notice as you think about your freshman mentoring experience this summer and what kinds of growth you have experienced. For example, how has your thinking about mentoring changed? How have your skills and abilities developed? What parts of your summer experiences have been most impactful on your learning? Jot down your observations (3 – 4 paragraphs are probably plenty, although you are free to write as much as you would like).

4. Post your observations in the drop box labeled "Final Summer Thoughts" on BrainHoney before arriving at training.

5. Print out a copy of your "Final Summer Thoughts," as well as your highlighted/marked reflections, and bring them with you to Fall Training on August 17th.

C5.2 Instructions for Video Analysis Part II

Video Analysis Part II

****Note: If you weren't on campus working with students this summer (and didn't participate in a recorded role play, you don't need to worry about this task)**

Thank you for all of your hard work this summer as you've read articles, engaged in conversations with students, and tied your learning together in your reflections.

You may recall that, at the beginning of the summer, you had the chance to watch a recording of yourself participating in a simulated mentoring conversation and then made some comments about what you saw in your recording. Now that you have completed summer training, we are interested in having you watch the same recording so you can consider how your skills may have changed across the summer. For example, are there things you notice about your recording now that you didn't see the first time you watched it? What do you notice about how you listened in the role play now that you have spent some time learning about and practicing the skill of listening? Etc. We hope that this second analysis will give you a chance to see how you have grown, where your skills have developed, and prompt your thinking on how you can continue to refine your mentoring skills during the coming fall semester.

We realize there is going to be a lot going on over the next few weeks, but **please be sure to complete this task by Tuesday, August 23rd.**

Instructions

(*Note: Be sure to read all the way through because this process will be slightly different than the first time you watched your recording)

1. Review the checklists (Noticing & Observing, Listening, & Asking Questions) in the "Skill Development Checklists" folder to remind yourself of what to look for as you watch. **Please don't skip this step. It's important that you be familiar with the checklists before you watch your recording!**

2. Find your recording
    e. Go to "react.byu.edu" and log in using your netid and password
    f. Click on the "View/Edit Feedback" tab at the top of the page. This should give you access to your recording (if you have problems logging in or finding your recording, email Bryce @ Bryce_bunting@byu.edu).

3. Watch and analyze your performance
   f. As you watch yourself, look for the things you are doing well. Specifically, watch for times when you effectively demonstrate the following skills:
      - Noticing & observing
      - Listening
      - Asking Questions
   g. Each time you see one of these skills demonstrated, use the commenting tool to "tag" the recording. This will mark the spot in the recording where you have seen yourself doing something well.
   h. Enter a comment for each "tagged" spot of the recording. Your comment should include the following elements (in this order):
      - A "code" indicating the skill you saw demonstrated
        - N = Noticing & observing
        - L = Listening
        - Q = Asking Questions
      - Brief comments on why this is a good example of the particular skill
   i. Also look for "missed opportunities" where you wish you would have done something different.
      - Tag these sections with the code "M" and enter comments (as described above). Your comments should briefly describe why this was a missed opportunity and what you would do differently if in the same situation again.
   j. At the end of your recording, enter a "summary comment" that identifies any aspect of your performance that stood out to you as you watched yourself, but that you hadn't noticed the first time you watched your recording (i.e. what did you notice this time, that you hadn't noticed before?)
      - Tag this comment with the code "New" (just like the codes above) and then enter your comment
      - For example, did you notice an effective question you asked that you hadn't paid attention to before? Was there something in your body language you hadn't noticed the first time you watched? What new observations of your listening did you make?
      - This will be a little longer "comment" than those above, but please be thorough.

Thanks for a great summer! Remember to finish this task by Tuesday, August 23rd!

C6.1 Presenters Guide for Day 1: Building rapport & establishing connections

Initiating Conversations
Day 1—Establishing Rapport/Connections

1. Intro/Overview **[5 minutes]**

- Reinforce importance of relationships & dialogue (from Brice & Emily's piece)
- Requires that we allow ourselves to be vulnerable and "step outside our comfort zone"

**This is going to be a focus for the rest of the week of training—we'll focus on some aspect of initiating conversations every day.

- This is very strategic on our part because the most important thing you will do throughout the semester—particularly during those first few critical weeks—is engage students in conversations.
- And, they need to be a particular kind of conversation depending on the student, their situation, and what you know about them
    - E.g. NSO vs. Non-NSO; summer vs. fall, etc.
- Our goal is to prepare you to engage in a variety of types of conversations
    - Informal (e.g. 1st week of class)
    - Formal (1st Interview)
    - NSO
- We hope that during the next week we can add some tools to your toolkit that will help you engage in these types of conversations
    - Things to look for
    - Things to listen for
    - Q?s to ask

      *Ultimately, we want you to have a basic strategy and to feel confident, so ask yourself, repeatedly, how can I apply this to my work with students?
- **Focus for today**: Comfort in getting to know new people & using conversation to establish rapport & connections

2. Traditional Approach **[10 minutes]**

- What types of questions do BYU students commonly ask one another when they first meet?
    - Generate list on Whiteboard (3 minutes)
- **Activity**: Start a conversation with someone you don't know (2 min)
    - Find someone w/ different colored nametag
    - Use these questions as the basis of the conversation

- Find new partner & repeat
- Repeat once more

- **Quick Write**: (2 min)
  - How did these conversations go?
    - How did you feel asking the Q?s
    - How did you feel as the responder?
    - What went well? What was awkward?

3. The "deep" approach **[10 minutes]**

- Provide slide w/ "deep" questions
  - Why did you decide to become a peer mentor?
  - Tell me about what you're looking forward to.
  - How do you hope to grow during your time as a peer mentor?
  - What would be a successful year for you as a peer mentor? How will you know how you're doing?
  - What challenges are you anticipating during the coming semester? What kind of support might you want?
- **Activity**: Start a conversation with another person who you don't know (5 min)
  - Use one or two of these questions [i.e. those on the slide] as the basis for your conversation
    - Try to get to know the person and establish a connection
    - Remember to use the skills we've focused on this summer (noticing/observing, listening, asking questions)

4. Comparison of two approaches **[10 minutes]**

*Our intent is not to say one approach is better than the other, but to think through the differences

- What kinds of similarities/differences did you notice across the two types of conversations?
- What challenges or pitfalls did you notice?
- When would you use each type of conversation?
- *How could they be used together?

5. Final Practice **[5 minutes]**

*****Use a combination of the above conversations/questions to get to know someone (has to be someone new)

6. Charge for the Week (get out notebooks) **[5 minutes]**

*You've met 5 or 6 new people over the last hour or so (maybe more). We want you to continue having these types of conversations throughout the next week.

#1: Pick one person you met today who you would like to "continue your dialogue" with.

- Look for 2 – 3 more opportunities this week to continue to get to know them
    - Ask Q?s you didn't get to ask
    - Ask about new things you want to know about them
    - Etc.

#2: Each day, start up conversations with at least two PMs you don't know

- The goal is to branch out and increase your connections

**The trick is to notice opportunities, take advantage of them, and then to make your conversations natural & authentic—just like what you'll be doing with students

Accountability: We'll do a random spot check each morning

- Who have you "continued with?"
- Who did you "meet?"

C6.2 PPT Slides for Day 1

Quick Write (2 minutes)

- *Jot down a few notes about how these conversations went.*
  - What went well?
  - What was awkward/uncomfortable?
  - How did you feel as the one asking the Q?s
  - How did you feel when you were responding to these Q?s

Additional Questions

- *Why did you decide to become a peer mentor?*
- *Tell me about what you're looking forward to.*
- *How do you hope to grow during your time as a peer mentor?*
- *What would be a successful year for you as a peer mentor? How will you know how you're doing?*
- *What challenges are you anticipating during the coming semester? What kind of support might you want?*

Charge for the Week

#1: Pick one person you met today who you would like to "continue your dialogue" with.

#2: Each day, start up conversations with at least two PMs you don't know.

C6.3 Toolkit Handout (Day 1)

Toolkit: Initiating Conversations
Day 1 – Building rapport & making connections

A. Traditional questions that could be used w/ students

B. "Deep" questions

C. Additional notes & observations

C6.4 Presenters Guide for Day 2: Informal conversations

Initiating Conversations
Day 2 – Informal Conversations

Materials:
-30 Sticky Notes (large)
-Sharpies
-Tape?

1. Intro/Framing **[3 min.]**
   - Many of your conversations will be spontaneous and informal in nature
     - Doesn't mean that they need to be unplanned or completely "from the hip"
   - Goal: Provide you with "start-ups" you can use in your conversations with students & give you a little practice in using them
   - Many of these conversations will occur before/after class during the first few weeks
     - Could also be chance encounters on campus

2. Student "Types" **[7 min.]**
   - The type of conversation you have during the first week will depend a bit upon the "category" of student you are talking to
     - E.g. Your conversation with someone you met at NSO will be different than someone whom you didn't meet during NSO
   - What other "categories" of students might you need to be thinking about and preparing for?
     - NSO
     - No NSO
     - Summer/Winter
     - Red Flags
     - Did very well during summer/winter
     - Recognize from directory (you know them, they don't know you)
     - Student with whom you've exchanged emails

3. Activity

*Pass out handouts to tables (or have them in piles at the tables already)

*Need to have 2 large sticky notes per table

- Assign two groups to each table **[10 min]**

    - Generate at least 1 0 “start ups” for each group & list them on your sticky note
    - Post stickies around the room
- Mill about & fill in your table **[5 min]**

4. Practice **[15 min]**

- Partner up
    - Partner decides which “type” of student they are
    - You start up a conversation using one of the phrases you’ve learned today
    - 2 minute rounds (swap after two minutes and reverse roles)
- Switch two more times
    - New partner
    - New “type”
    - New “phrase”

5. Debrief & Wrap Up **[10 min]**

- How did things go?
- What “tools” can you take with you into the first week of classes?
- Best practices?

C6.5 Toolkit Handout (Day 2)

Toolkit: Initiating Conversations
Day 2 – Informal Conversations

General "Start-up" phrases:

Helps for Informal Conversations w/ particular types of students:

Student "Type"	Goals/Objectives	Possible "start-up" phrases

Other Ideas/Impressions:

C6.6 Presenters Guide for Day 3: Formal Conversations

Initiating Conversations
Day 3 – Formal Conversations

1. Intro/Overview **[15 min]**
    - How might your "formal" conversations (e.g. interviews) w/ students be similar/different from your informal interactions?
    - Objectives:
        - Strengthen relationship
        - Answer Questions/Connect to resources
        - Promote reflection
        - **Facilitate selecting a major/using advisement resources**
2. Student "types"
    - Winter
    - Summer
    - Fall
3. Outline & Checklists
    - Before the interaction
        - Review directory
        - Read Notes
        - Review Past Interactions
        - Let the student know what to expect
    - During the Discussion
        - General guidelines
            - Address Questions/Concerns
            - "How does the semester look for you?"
                - Look up schedule in MyMAP
                - Unpack syllabus/syllabi for bundle courses (esp. FYW & A HTG)
                    - Course Objectives
                    - Major assignments
            - Selecting a major
                - "Tell me a little about where you are in your decision about a major."
                    - MAPs
                    - CACs
                    - Major Fair (October 12th)
        - Winter: Focus on selecting a major

    - Summer: Reflect on summer term
        - Surprises & Challenges
        - Successes
        - Lessons learned
        - Plans for fall
- After the Discussion
    - Enter note in Achilles
    - Make plans for follow up/additional conversations

4. Practice **[20 min]**

- Find a partner (different color)
- PM = those who have worked w/ students before
- "Type" determined by student's birthday
    - January – April: Winter
    - May – August: Summer
    - Sept. – Dec.: New Fall Student
- Try to be as true to your own experiences as possible (talk about your most recent semester, your decision about your own major, etc.)
  **Use the "During Checklist"
- 7 - 10 minute conversation
- Repeat; switch roles

5. Debrief **[10 min]**

- What did you struggle with? What was hard/awkward?
- What did you see/hear going well?
- What kind of work will you need to do before you meet with your first student?

6. Setting up the meetings

- Email
- Sign-up
- Call
- Face-to-face

**Let them know why you're meeting

C6.7 PPT Slides for Day 3

Formal Conversations

Objectives:

- Strengthen the relationship
- Answer questions/address concerns
- Promote Reflection
- **Facilitate selection of a major & connection w/ advisement resources**

Checklist: First Interview

Before the Conversation

- ☐ Review Directory (e.g. When was their first enrollment in the program?)
- ☐ Read Achilles Notes
- ☐ Recall past interactions
- ☐ Let the student know what to expect

Checklist: First Interview

During the Conversation

- Address Questions/Concerns
- Discuss coming semester
  - "How does the semester look for you?"
  - Look up schedule in MyMAP
  - Review syllabi for bundle courses
- Inquire about their major decision
  - "Tell me about where you are in your decision about a major."
  - Explore MAPs
  - Connect to CACs
  - Let them know about the Major Fair (October 12th)

Checklist: First Interview

For Winter Students:

- Focus on selecting a major

For Summer Students:

- Help them reflect on summer term
  - "Tell me about how your summer term went."
  - Discuss surprises/challenges
  - Invite them to share successes
  - Discuss lessons learned & application for fall semester

Checklist: First Interview

After the Conversation

- ☐ Enter note in Achilles
- ☐ Make plans for follow up or additional conversations

C6.8 Presenters Guide for Day 4: New Student Orientation conversations

Initiating Conversations
Day 4 – NSO Conversations

1. Reflection **[3 min]**
   - Think back to your NSO experience (or first day on campus)
     - What were you excited about or looking forward to?
     - What were you nervous/anxious about?
       *How could a PM have been most helpful to you?

2. Practice **[10 min]**
   - Partner up
   - Play yourself @ NSO
     - Assume that you are in the Marriott Center, waiting for Convocation to start
     - 3 min conversation, then switch

3. Reflection **[5 min]**
   - What is a "foil" in literature or film?
   - Recall your own experience & then think about a student very different from you.
     - How might they be feeling @ NSO?
     - How could a PM be responsive to their needs?

4. Practice **[15 min]**
   - Same as above, but play your "foil"
   - Two rounds (3 min each)
   - New partner each time

5. Debrief **[15 min]**
   - What insights did you have during this exercise?
   - What did you learn by playing your foil?
   - Compare today with last Wednesday—how have your conversations changed? How have you changed?

6. *Wrap Up

- Get outside of your comfort zone
- Make it a focus to initiate conversations
- If there are things that have been hard for you, make it a goal to improve
    - Talk to your supervisor/coordinating PM about your plans
- Start tomorrow @ YGL Training

C6.9 PPT Slides for Day 4

Quick Write (3 minutes)

- *Think back to your own NSO experience (or first day of class as a freshman)*
  - What were you excited about or looking forward to?
  - What were you nervous/anxious about?
  - How could a PM have been most helpful to you?

Quick Write (3 minutes)

- *Recall your own NSO experience and then write a description of a student who is your "foil" (i.e. your polar opposite).*
  - What would they be excited or nervous about?
  - How would their perception of NSO be different than yours was?

C7.1 Instructions for "Actors" (i.e. student profile, description of scenario, & script)

Student Profile: Sarah (or Steve) Smith

Sarah came to BYU with high expectations about her ability to be successful, but things have not gone quite as well as she has planned. She enrolled in 16 credit hours at the beginning of the semester because "that's what she did in high school." But, she has fallen behind and has become quite overwhelmed. She doesn't receive much support from her family and is working 20 hours each week in catering to support herself. She loves her job, but it takes up lots of time and the hours are very unpredictable. Her main motivation behind her studies is to earn high grades. She has been particularly discouraged with her WRTG 150 class and her scores on her papers haven't been as high as she expected or desired, which has been discouraging for her.

- Average HS student
- Highly motivated academically
- Somewhat socially isolated (feels like she doesn't have anyone she can talk to)
- Grades are the motivating factor behind her studies
- Very anxious about doing well
- Has a history of anxiety & depression (saw a therapist while she was in high school, which was helpful)
- Has a difficult time waking up for morning classes

The Scenario:

- Drops by office to ask "when the last day to withdraw classes is?"
- Initially vague & evasive (just wants the deadline)
- Appears worn out or tired (multiple yawns and frequent rubbing of eyes)
- Is behind in her classes (particularly WRTG 150)
- Discouraged about feasibility of getting caught up (demonstrates anxiety or hopelessness)
- Hesitant to ask for help or use resources
- Feels comfortable with WRTG 150 instructor
- Not connected to roommates

The Script

1. Pose question ("When is the last day to withdraw from classes?")

Peer Mentor Behavior/Action	*Your Response*
Peer mentor "guesses" or says "I don't know"	Prompt them to find out (e.g. "Is there any way you could find out?")
Peer mentor offers to show you	Willingly sit down and listen

2. Inquiring about your situation (i.e. finding out why you think you might need to withdraw)

Peer Mentor Behavior/Action	*Your Response*
PM makes no attempt to find out why you are thinking about withdrawing	Stand up to leave and make a passing comment to the effect of "Thanks, things have just been tough lately" (could show some emotion/discouragement as well)
PM asks about your situation, but does it too early in the conversation, seems insincere, or seems to be interrogating	Shut down, evade the question, try to end the conversation, etc.
PM builds rapport before asking about situation and asks in a non-threatening & comfortable way	Open up and reveal more about your situation (e.g. fallen behind in class, can't get up in morning, etc.)

3. Engaging in reflection

Peer Mentor Behavior/Action	*Your Response*
PM makes no attempt to invite reflection, just gives advice	Resist suggestions (e.g. "I don't think that would work for me," "I've tried that" Accept half-heartedly and end conversation
PM asks reflective questions	Reflect willingly and openly

4. If necessary, ask "What do you think I should do?"

- Listen to see if PM gives advice or promotes deeper reflection and/or connects to resources

General Response Table

Peer Mentor Behavior/Action	*Your Response*
PM seems nervous/anxious	Mirror their nervousness
PM seems comfortable and relaxed	Slowly warm up
PM has closed body language	Remain reserved & vague
PM responds with empathy and sincerity	Open up and reveal more about situation
PM does majority of talking	Close down and withdraw
PM invites reflection	Reflect openly

**Role-plays should last at least 5 minutes, but no more than 10

C7.2 Scenario Description for Mentors & Site Preparation Checklist

The Scenario: *You're working one of your assigned office hours and one of your students (Steve/Sarah) has stopped by with a question. Assume that you met Steve/Sarah during NSO and met with them during the first few weeks of the semester. During that meeting Steve/Sarah seemed comfortable with you, fairly well-prepared, and confident about the semester. You have not had much interaction with them since that first meeting (outside of brief conversations before/after class).*

Role Play Checklist

- ☐ Orient PM to the session (e.g. purposes, context, etc.)
- ☐ Have PM log into "React"
- ☐ Ask "Are you ready?" and then make sure recorder is on & working
- ☐ Start timer
- ☐ Stop recording (at least 5 min. of footage, but no more than 10)

Appendix D: Instructional goals

1.0 Prepare PMs to initiate and sustain productive mentoring conversations with freshmen during the fall semester.
- 1.1 Develop basic competence in core mentoring communication skills
  - 1.1.1 Prepare PMs to listen effectively to students
    - 1.1.1.1 Focuses on the student and stops other activities
    - 1.1.1.2 Makes and sustains eye contact
    - 1.1.1.3 Uses appropriate body language (e.g. nodding, open posture)
    - 1.1.1.4 Allows the student to do the majority of the talking
    - 1.1.1.5 Uses reflective listening techniques
      - 1.1.1.5.1 Restates or paraphrases the student's message
      - 1.1.1.5.2 Asks for clarification when necessary
      - 1.1.1.5.3 Offers summaries after critical parts of the conversation
    - 1.1.1.6 Uses silence and waiting appropriately
    - 1.1.1.7 Responds appropriately
      - 1.1.1.7.1 Answers questions clearly and directly
      - 1.1.1.7.2 Shows empathy and understanding
  - 1.1.2 Prepare PMs to notice and observe both verbal and non-verbal behavioral cues among freshmen
    - 1.1.2.1 Notices verbal cues
      - 1.1.2.1.1 Emotion in voice
      - 1.1.2.1.2 Inflections & tone
      - 1.1.2.1.3 Colloquialisms & accent
    - 1.1.2.2 Observes for non-verbal cues
      - 1.1.2.2.1 Body movements
      - 1.1.2.2.2 Facial expressions
      - 1.1.2.2.3 Physcial appearance (e.g. cleanliness, signs of fatigue, etc.)
    - 1.1.2.3 Effectively observes students in classroom settings
      - 1.1.2.3.1 Positions self in strategic way to facilitate observation
      - 1.1.2.3.2 Observes student academic behaviors (e.g. note-taking, engagement w/ instructor)
      - 1.1.2.3.3 Observes interaction w/ other students
      - 1.1.2.3.4 Observes attendance and/or tardiness concerns
      - 1.1.2.3.5 Takes notes of important observations
    - 1.1.2.4 Notices/observes patterns of engagement among students
      - 1.1.2.4.1 Responses to email messages
      - 1.1.2.4.2 Attendance at NSO
      - 1.1.2.4.3 Class attendance & engagement
      - 1.1.2.4.4 Receptiveness to individual interviews
  - 1.1.3 Prepare PMs to ask effective questions

1.1.3.1 Uses questions to facilitate learning
1.1.3.1.1 Asks reflective questions
1.1.3.1.2 Asks questions that promote self-authorship and personal responsibility
1.1.3.1.3 Asks questions that invite student to articulate learning
1.1.3.2 Asks open questions that facilitate dialogue
1.1.3.3 Asks questions to gather information
1.1.3.3.1 Identifies students' interests
1.1.3.3.2 Identifies student concerns/challenges
1.1.3.3.3 Determines what students already know
1.1.3.4 Listens effectively for students' responses (see 1.1.1 above)
1.1.3.5 Avoids rapid series of questions or interrogation-like interactions
1.1.4 Prepare PMs to initiate conversations effectively
1.1.4.1 Demonstrates appropriate levels of warmth, enthusiasm, and excitement
1.1.4.2 Strategic and intentional in initiating conversations
1.1.4.2.1 Seeks out specific students
1.1.4.2.1.1 Struggling students
1.1.4.2.1.2 Isolated students
1.1.4.2.1.3 Unknown or unresponsive students
1.1.4.2.2 Has a purpose for initiating a conversation
1.1.4.2.2.1 Follow up
1.1.4.2.2.2 Get to know student/build rapport
1.1.4.2.2.3 Provide critical information to student
1.1.4.2.2.4 Make arrangements for future interaction
1.1.4.2.3 Initiates conversations in timely way
1.1.4.2.4 Reviews notes/documentation of past interactions
1.1.4.3 Remembers students' names and details of past interactions
1.1.4.4 Respectful of students' time and makes plans to continue conversations or follow up at a later time when appropriate

1.2 Develop increased confidence among PMs in initiating conversations with freshmen

1.3 Facilitate the development of a "growth mindset" among PMs
1.3.1 Belief that improvement in mentoring skills/abilities is possible through effort and persistence
1.3.2 Increased receptivity to feedback and correction
1.3.3 Develop a habit of reflection and self-evaluation
1.3.4 Openness to continued learning and growth after summer training after summer training has concluded

Appendix E: Modified work model synthesis

Task: Initiating Focused Mentoring Conversations

Work Model/Module Name	Instructional Goals (from Appendix D)
#1 Growth Mindset	1.2, 1.3, 1.3.1, 1.3.2, 1.3.3, 1.3.4
#2 Noticing & Observing	1.2, 1.3.2, 1.3.3, 1.1.2, 1.1.2.1, 1.1.2.2, 1.1.2.3, 1.1.2.1.1, 1.1.2.1.2, 1.1.2.1.3, 1.1.2.2.1, 1.1.2.2.2, 1.1.2.2.3, 1.1.2.3.1, 1.1.2.3.2, 1.1.2.3.3, 1.1.2.3.4, 1.1.2.3.5
#3 Listening	1.2, 1.3.2, 1.3.3, 1.1.2.1, 1.1.2.2, 1.1.1, 1.1.1.1, 1.1.1.2, 1.1.1.3, 1.1.1.4, 1.1.1.5, 1.1.1.6, 1.1.1.7, 1.1.1.5.1, 1.1.1.5.2, 1.1.1.5.3, 1.1.1.7.1, 1.1.1.7.2
#4 Asking Questions	1.2, 1.3.2, 1.3.3, 1.1.2.4, 1.1.3, 1.1.1, 1.1.3.1, 1.1.3.2, 1.1.3.4, 1.1.3.5, 1.1.3.1.1, 1.1.3.1.2, 1.1.3.1.3, 1.1.3.3.1, 1.1.3.3.2, 1.1.3.3.3
#5 Summer Conclusion	1.1.3.1, 1.2, 1.3, 1.3.1, 1.3.2, 1.3.3, 1.3.4
#6 Fall Training – Initiating Conversations	1.2, 1.1.4, 1.1.4.1, 1.1.4.2, 1.1.4.3, 1.1.4.4, 1.1.1, 1.1.2, 1.1.3, 1.1.4.2.1, 1.1.4.2.2, 1.1.4.2.3, 1.1.4.2.4, 1.1.4.2.1.1, 1.1.4.2.1.2, 1.1.4.2.1.3

Appendix F: Summative assessment instruments

Traditional Post Assessment

1. Name & Netid

2. Are you a

- New Peer mentor (this will be your first fall semester working as a PM)

-Returning PM

3. This summer were you

- Working in the office on a regular basis (i.e. filling office hours, etc.)

    - Were you working with students enrolled in the summer Freshman Mentoring program?

-Working off campus (i.e. clocking in only for the time you spend completing training activities)

4. Which of the following statements best describes your participation in summer training (i.e. the modules posted in BrainHoney)?

-I participated in all of the summer training modules

-I was hired after the beginning of summer term and only completed some of the modules

-I was hired after the beginning of summer term, but still completed all of the modules

-I have not participated in any of the summer training modules

Or

Which of the following summer training modules did you participate in?

-Module #1: Growth Mindset

-Module #2: Noticing & Observing

-Module #3: Listening

-Module #4: Asking Questions

-Module #5: Conclusion

-I did not complete any of the modules

5. Which of the following statements best describes your current level of <u>overall mentoring skill</u>?

- Highly Unskilled
- Somewhat Unskilled
- Slightly Unskilled
- Slightly Skilled
- Somewhat Skilled
- Highly Skilled

6. Please rate your skill level for each of the following skills

- Noticing & Observing
- Listening
- Asking Questions
- Initiating Conversations

*Same options as above

7. Which of the following statements best describes your current level of confidence in your ability to interact with freshmen and carry out your mentoring responsibilities?

- Not at all confident
- Somewhat unconfident
- Slightly unconfident
- Slightly confident
- Somewhat confident
- Very Confident

Retrospective "Then" Assessment

1. Name & Netid

Reflect back on your skill level and confidence before summer training began (i.e. the beginning of the summer term or late June). Now, given your current understanding of the concepts and skills we focused on in the training, we would like you to assess your skill level and confidence when you began training. These items are similar to those you have responded to in other surveys, but when you rate yourself this time there is no need to recall previous responses or ensure that these ratings correspond with other ratings you have given.

2. *Looking back*, which of the following statements best describes your overall mentoring skill <u>when we began summer training</u> in June?

- Highly Unskilled
- Unskilled
- Slightly Unskilled
- Average
- Slightly Skilled
- Skilled
- Highly Skilled

6. *Looking back,* please evaluate your skill level <u>prior to training</u> in each of the following areas

- Noticing & Observing
- Listening
- Asking Questions
- Initiating Conversations

*Same options as above (arranged in a matrix format)

7. *Looking back, w*hich of the following statements best describes your confidence in your abilities when we began training in June?

- Not at all confident
- Slightly unconfident
- Neither confident or unconfident
- Slightly Confident
- Very Confident