

# Authentic Professional Learning: Creating Faculty Development Experiences through an Assessment Institute

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## Abstract

*This case study analyzes experiences of participants in an Assessment Institute (AI) for faculty development on ePortfolio. In earlier research on the AI, findings showed that focused faculty development increased instructor confidence in teaching and learning with ePortfolio. The present study expanded the initial research by including participant data from a second session of the AI, and exploring the research through a qualitative lens using transformative learning as the framework. Strong support for the use of dialogue and critical reflection in faculty development were found during the research. Our findings suggest that professional development environments that encourage transformative learning by means of discussion, sharing of different perspectives, and reflections on implementation and best practices yield positive results. These factors can inform researchers and practitioners interested in structuring similar faculty development initiatives in the higher education environment.*

*Keywords:* authentic learning, faculty development, ePortfolio, reflective practices, perspective transformation

## Introduction

In the 21<sup>st</sup> century, the need for professional development is perhaps greater than ever before. Anyone who enters today's job market needs to learn constantly in order to stay relevant amid rapid changes in technology and knowledge. Constant transformation is expected of modern professionals in any workplace (Vey et al., 2017). Therefore, learning environments need to prepare future professionals for transformation, no matter their workplace, discipline, occupation, or age (Merriam & Brockett, 2011; Tomlinson & Holmes, 2017). In order to lay the foundation for successful learning and foster competent future workers, professional development of higher education faculty is crucial (Weller Swanson & Kayler, 2010). Despite this, research has primarily focused on the individual faculty participant and has produced little generalizable knowledge to guide programs or improve student-learning outcomes (Austin & Sorcinelli, 2013; Felder & Brent, 2010). In reviewing the literature, we observed that most studies have focused on practitioners at the primary education level, rather than higher education (Avalos, 2011; Opfer & Pedder, 2011). In practice, professional development of faculty in higher education is common, but many sessions and workshops still focus on basic learning theory and technology skills, rather than on enhancing authentic or inquiry-based learning experiences (Webster-Wright, 2009). More recently, critical research investigating higher education faculty development also noted a need to focus on reflection and inquiry practices rather than content (Amundsen & Wilson, 2012). These authentic learning experiences enable opportunities for both reflection and integration of skills through practice, which are central components of lifelong and transformative learning strategies (Merriam & Bierema, 2013). Reflection is key to learning from experience, especially in the context of teacher experiences, and the development of faculty skills and aptitudes (Clayton & Ash, 2005; Hubball et

al., 2005). Therefore, reflective practices that support transformative learning in faculty development programs may directly translate to a deepened level of learning for students.

### **ePortfolio**

One instructional strategy used by faculty to deepen learning is the ePortfolio. ePortfolios (or electronic portfolios) are digital platforms that allow learners to document, curate, and highlight their learning experiences (Chau & Cheng, 2010). Part of what makes ePortfolios compelling is their ability to help students develop reflective writing, as well as technical and digital literacy skills. For this reason, ePortfolios have been recognized as a High Impact Practice (HIP)—an evidence-based practice that greatly contributes to student learning (Watson et al., 2016). ePortfolios enable students to construct a synthesized document of their professional selves that provides a robust example of lifelong learning (Cambridge, 2010; Chen, 2009).

### **Institutional Context**

At our large, southeastern, research university, the ePortfolio Project (hence called “the project”) is a campus-wide initiative that supports both students and faculty as they create ePortfolios or integrate them into their curricula (Marshall et al., 2017). Because curricular changes take time and needs vary across departments, the project works with cohorts, which are faculty learning communities (FLCs) comprised of faculty and staff. Supported by the project, FLCs implement ePortfolios, develop sustainable curricula structures, and allow for professional development of best practices (Shulman et al., 2004).

Since its inception, the project chose to support outward-facing, professional ePortfolios to foster digital and ethical literacy skills (Marshall et al., 2017). The project uses free, intuitive web platforms to allow for creative development by students, and ensure they keep their ePortfolios even after graduation. These variations in choice and implementation, both by faculty and students, posed challenges for the project, especially with regards to assessment. To address these challenges, the project established an Assessment Institute (AI), with the intent of evaluating student performance, contributing to faculty development, and enabling research on best practices for higher education ePortfolios (Marshall et al., 2017).

## **Background Literature**

In the introduction, we outlined the connections between transformative learning, faculty professional development, and critical reflection. In the following literature review, we provide an overview of these four concepts.

### **Transformative Learning**

The research literature is robust in the area of transformative learning, and acts as an agent of change for the professional adult learner (Berger, 2004; Brock, 2010; Cranton, 1996; Cranton & King, 2003; Cranton & Carusetta, 2004; Dix, 2016; Gatt, 2009; Glisczinski, 2007; Kitchenham, 2008; King, 2004; Opfer & Pedder, 2011; Taylor, 2007; Taylor & Cranton, 2013; Trede et al., 2011). Mezirow’s (1991) theory of transformative learning is based on disorientating dilemmas that challenge the way the learner thinks. Adult learners are encouraged to critically think and reflect on beliefs and assumptions they have acquired and challenge whether they are accurate. Mezirow (1997) believed that this process allowed adults to reflect on the experience and change or transform their individual view. Through this transformative process, the learner becomes open to other points of view and allows new ideas to be included in their frame of reference. This openness is especially important to the professional adult learner and promotes an appreciation for lifelong learning (Cranton & King, 2003).

Discourse or dialogue is a critical component of the transformative learning process. Adults learn together by discussing related experiences, critically examining alternative points of view, and

developing a common understanding (Mezirow, 1997). Snyder (2008) suggested that the transformative learning process informed curriculum decision making and instruction in higher education, and recommended that future research on transformative learning be longitudinal in nature, rather than one-time studies. This approach would allow investigators to explore the importance of time in the process. In addition, Snyder (2008) recommended that data from transformative learning studies be triangulated with additional documents to confirm self-reported learners' experiences.

In another study, Brock (2010) analyzed the steps in Mezirow's transformative learning theory and investigated the importance of critical reflection. This study found that comparison of personal thoughts and ideas to an external reference group was significant in creating an environment for change during the learning process. Brock (2010) recommended that educators' values change gradually in the learning environment, as meaningful reflection requires time. In addition, the author recommended sharing of lessons learned in order to elicit new perspectives or alternative points of view to enhance the collaborative learning process.

Kitchenham (2015) also supported the need for critical reflection and problem solving in higher education. He noted a lack of evidence for transformation of learning in teaching and instruction, especially in the area of assessment. To improve student-learning outcomes and deepen learning, faculty were encouraged to create more authentic learning experiences, rather than utilizing the traditional testing methods of assessment (Kitchenham, 2015).

One longitudinal case study looked for transformative learning experiences during a 5-year professional development program related to instruction with technology (Whitelaw et al., 2004). Although this longitudinal study did not confirm transformative learning experiences by the participants, several recommendations were made for future studies. The researchers' main recommendation was for creation of authentic learning experiences in faculty development (Whitelaw et al., 2004). In addition, the researchers recommended collection of self-reported data, both pre- and post-intervention, to provide additional data sources to document occurrences of transformative learning.

### **Faculty Professional Development**

Although most faculty today have interacted with some form of instructional technology, not all have received actual training on instructional pedagogy (Herman, 2012; Robinson & Hope, 2013). Indeed, some faculty may have never attended any professional development activities related to instruction; thus, leaving them to model their teaching after how they themselves were taught. To change behaviors and enhance instructional skills, it is important for faculty members to engage in professional development focused on teaching and learning (Cranton & King, 2003). Although content knowledge is critical to make one proficient in a discipline, it may be even more important to understand the process of how learning occurs. This, along with a recognition of the learner's unique characteristics, may be especially true when working with the adult (Knowles et al., 2012).

Faculty development in higher education can take many forms, including self-directed learning experiences, formal professional development programs, and organizational initiatives (Amundsen & Wilson, 2012; Herman, 2012). This diversity of methods makes the generalization of best practices difficult. Chism et al. (2012) provided a comprehensive review of 138 studies on educational development practices and found that, although the study methods varied widely, the majority reported effective results, showing improvement in faculty knowledge and skills. Institutes and workshops that focused on a theme and delivered information over the course of one day or more were shown to have positive effects on teaching attitudes and changes in instructional practices for faculty (Chism et al., 2012).

### **Critical Reflection Activities**

Transformation of teaching practices in higher education is an experiential, iterative process that requires both time and quality reflective activities to improve understanding, and sustain success (Clayton & Ash, 2005). Thus, a major challenge for faculty development is to create reflective events and activities that allow the faculty not only to learn but also “integrate reflective methods into their courses for student learning” (Clayton & Ash, 2005, p. 161). This requires an understanding that learning is a lifelong process for both faculty and students, and that time for reflection is critical to the process (Brookfield, 2017).

Brookfield (1992) discussed the reflective practitioner and supported the need for checking assumptions and lifelong learning in educators of adults. More recently, Brookfield (2017) continued to challenge educators to check the accuracy and validity of their assumptions with other educators. By reviewing and reflecting on their teaching practices with other faculty, they become more aware, challenge their assumptions, and integrate new ways of thinking—a transformation. Therefore, although critical reflection often begins alone, it is only effective or transformative when it becomes collaborative.

### **Methods**

To prepare to assess student ePortfolios, the project established an Assessment Institute (AI). The project facilitated two sessions of the AI, with one in 2016 and another in 2018. Both sessions included two days of professional development and training on the use of a summative rubric for ePortfolios (Marshall et al., 2017).

### **Case Study Approach**

This study examined the AI sessions offered by the Office of University Writing (OUW) at a large, southeastern research university. The AI was the case unit, with both the 2016 and the 2018 sessions included as subunits of a single case, using an embedded design (Yin, 2018). It was possible to consider these two sessions as subunits of the same case as there were no significant differences in their design, schedule, structure, or content. Only minor adjustments were made to participant selection in 2018. Namely, staff members who were cohorts of the project were also included as participants (only faculty participated in 2016), and the project grouped faculty into pairs for group scoring (the participants themselves selected their pairs in 2016). Otherwise, the workshop format, schedule, and processes remained the same for the participants in both sessions of the AI.

The descriptive case study approach was an appropriate strategy for this research as it allowed for an in-depth exploration on the use of ePortfolio as a HIP by higher education professionals. Multiple sources of evidence supported the case study approach, including qualitative survey feedback, field notes, and interview data. According to Yin (2018), the case study can be used to explain, describe, or explore events or phenomena in the contexts in which they occur. Thus, the case design was utilized to develop a deeper understanding of the participants’ experiences during the AI.

### **Participants**

This case study analyzed the experiences of 34 participants, which included faculty and staff from across campus in different disciplines, from a variety of age groups, ranks, and experience. Both sessions of AI included a mixture of those actively and less actively involvement in the university ePortfolio initiative. All of the participants were from colleges or programs that had cohorts involved in the project.

### **Data Collection**

The AI was designed to collect research data and publish the results, thus an Institutional Review Board (IRB) approval was sought and received through the university process (Marshall et al., 2017).

### **Survey**

Participant data was collected via a post-session survey instrument, which contained both open and closed-ended questions. The survey format remained the same for both sessions and was distributed during the sessions by project staff. This case analysis focused only on the two open-ended questions in the post-session survey.

### **Other Evidence**

Other sources of data were collected to support a thorough understanding of the case, provide for triangulation of the data, and increase the internal validity of the case (Yin, 2018). An interview was held with both the Director and Assistant Director of the project who had developed the AI concept, created the surveys, and conducted both sessions. Both researchers conducted the open-ended interview, which produced several sources of data, including transcripts from the interview, debriefing notes from the sessions, and the original AI research article that was published (Marshall et al., 2017).

## **Data Analysis**

The primary analysis for this case study was inductive and comparative, using the method based on Glaser (1965) and further developed with an adult education approach by Merriam (2009). The two main questions that guided our analysis of the data were the open-ended questions from the AI post-session surveys:

- Research Question 1 – What changes in understanding/thinking, if any, happened during the AI and how they occurred?
- Research Question 2 – What improvements can be made to future instances of the AI?

### **Trustworthiness**

The researchers were not part of the AI staff and were not involved in the survey distribution or collection of data. The AI staff provided the researchers access to the de-identified responses, with no access to the original survey documents. Therefore, participant anonymity was preserved.

The inductive analysis (Merriam, 2009) began by the two researchers working independently. Each researcher immersed themselves in the data collected (survey responses, field notes, journal article, interview transcripts) and highlighted areas that appeared to be meaningful, recurring, and reflective. Once data sources were reviewed, the researchers coded a sample of participant responses from the 2016 session post survey. This process was undertaken to test for significant differences regarding how the researchers coded the data. No significant disagreements were found; therefore, each researcher proceeded to code the entire data set of post survey responses. In addition, the researchers reviewed and triangulated the other sources of data as part of the analysis process (Merriam, 2009). Finally, the researchers then compared their codes, adjudicating differences and merging similar entries to jointly devise a final set of codes after reaching saturation (Merriam, 2009).

### **Analysis Framework**

The post-session surveys' open-ended questions provided in-depth information as to the experiences of faculty participating in the AI. Thus, the researchers performed an inductive analysis of the open-ended responses to the surveys using Mezirow's (1991) transformative learning theory

as a framework to understand the reflection process and any changes in thinking by the participants. For instance, during both the sessions, the scoring process on ePortfolios was undertaken in pairs or teams, requiring faculty to reach a common understanding of the rubric and adjudicate scores on the ePortfolios (Marshall et al., 2017). This process emphasized both discussion and reflection to provide a format that allowed for critical thinking. The self-reported data from the post surveys represented participants' reflections on changes and/or transformation from the AI. Therefore, we suggest that the data provided indications of the occurrence of transformative learning by the participants.

In the end, four themes were produced through the coding process, analysis and triangulation of the data to ensure validity and reliability (Merriam, 2009). The theme "contact with different perspectives," related only to the first open-ended question, and thus provided data for the first research question. Another theme, "training," was comprised of suggestions for improving the AI or future workshops, and was specific to the second open-ended question. The remaining two themes, "discussion" and "best practices" related to both research questions (see Figure 1).

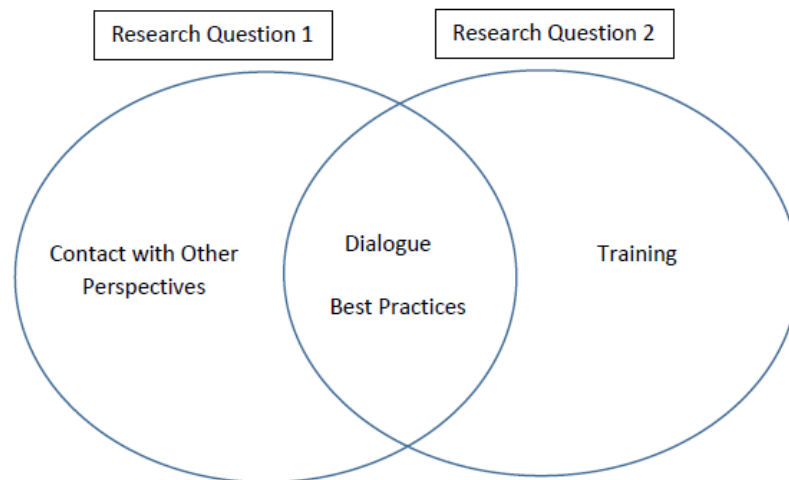


Figure 1: Conceptual grouping of themes from analysis by research questions.

### **THEME 1 – Dialogue, Discussion, and Collaboration**

The design of the AI provided many opportunities for purposeful dialogic activity. For instance, general discussion was undertaken to clarify the rubric throughout the sessions. In addition, participants were asked to mediate differences in ratings as part of the scoring process. Lastly, the AI concluded with a group-wide debrief discourse. All these activities presented diverse avenues for discussion, with distinctive contexts and ways to negotiate meaning through reflection (Mezirow, 1991). In line with this, many participants highlighted dialogue as the most helpful aspect of the AI.

During the adjudication process on scoring ePortfolios, participants resolved discrepancies, discussed matters of assessment and learning outcomes, and compared how their partners would rate the exact same ePortfolio. For instance, one participant related how discussion with their partner allowed for a better understanding of how to assess ePortfolios: "it really helps having someone else to bounce ideas off of in scoring the ePortfolios" (Participant 9B). Another participant, 26A, detailed discussion as a means of becoming aware of what they did not know:

As a two-year member of the cohort, I feel fairly confident in my understanding, but these two days have helped me to really unpack student ePortfolios, the rubric, and my own beliefs/biases. Having adjudication discussions helped me to see areas where I had less

understanding than I thought and allowed me to look at these areas from another perspective.

Participant 6B also noted the role of dialogue in addressing biases and clearing misconceptions:

I particularly liked how we talked through our biases ahead of time, as I think we all learned a lot about ourselves and each other through that process. I also feel that I know my colleagues from across the campus better than I typically would from the OUW or other smaller informal sessions.

Mezirow (1995) recognized this process of talking through biases as an essential part of discourse, which he described as, “a special kind of dialogue learners undertake to review, assess, and validate newly transformed habits of mind or points of view” (p. 53). Through discourse, learners make sense of new information and reach consensus by critically examining and comparing their assumptions with their peers. Mezirow (1995) suggested that discourse usually occurs during one-on-one interactions. As such, discussions with the scoring partner were a suitable place for fostering this significant part of transformative learning.

Some participants considered that engaging in informal dialogue during sessions was helpful. Participant 27B related the value of informal discussion during lunch break: “Lunch was a nice time to hear what others are doing and how they have used it in their programs and/or courses.” Another participant (25A) noted, “Informal discussions have spurred some new ideas on effectively implementing ePortfolio in the future.” While what is meant precisely by informal dialogue was not specifically detailed, it is possible to make a distinction between conversations that happened during the scheduled dialogic activities, such as rubric training, score adjudication, and debrief time, from conversations that occurred outside of the formal session structure. This may be important to note when creating different types of reflective discussions.

As noted above, dialogue is essential to the transformative learning process. It is how learners validate newly transformed points of view—and sometimes how they encounter what prompts transformation in the first place (Mezirow, 1991). These findings suggest that dialogue contributed to transformative learning during the AI, helping participants examine and expand upon set ways of thinking.

## **THEME 2 – Contact with Other Perspectives**

The AI was a cross-disciplinary event, featuring participants from disciplines such as nursing, veterinary medicine, and engineering, each with its own unique institutional contexts, goals, and challenges. Throughout the AI, discussions among participants across this wide range of disciplines created an environment in which they were organically introduced to different perspectives and viewpoints.

Many participants reported that, through the AI, they were able to see how the ePortfolio was used in other departmental or disciplinary contexts. By comparing the experiences of others with their own, participants were able to reflect upon how they conceived of and used ePortfolios. This contact with other perspectives was described in various ways, such as having “a glimpse into how others have scaffolded ePortfolio creation” (3B); “a better understanding of how ePortfolios are used in various departments across campus” (9B); and learning “that there are certainly a wide range of experiences across campus with ePortfolio” (1B).

In the case of participant 10B, understanding of how ePortfolios were used in other contexts was closely related to their own and their department’s use of the ePortfolio:

Seeing judgment and evaluation of rubric aspects from colleagues across various disciplines other than my own. I gained more awareness of common issues as they relate to the outcomes to try to teach students to avoid. I hope to begin working on how to assess

ePortfolios within our department in the future, so this experience provides a strong foundation from the project wide perspective.

The themes of dialogue and contact with different perspectives appear to be closely related. Most of the responses make a connection between the two, either explicitly (through terms such as “discussions” or “hearing from [others]” or implicitly (see Figure 1 for interaction of themes). This reveals the importance of dialogic practices in which participants have access to discourse from different points of view. By comparing their experiences with others’, they can imagine how things could be otherwise, which, according to Mezirow (2009), “is central to the initiation of the transformative process” (p. 95).

In two different comments, Participant 15A explicitly pinpointed of contact with other perspectives as cause for a transformation in perspective. First, when asked about potential improvements for the AI, they said:

I would have liked to have heard more about why normalizing is necessary early in the first day. My discipline uses objective measurements of things like length, mass, and chemistry. So the data are the data. Now I think I understand that normalizing is necessary because the assessment is very subjective. I especially enjoyed the group comparison of scores and the adjudication process.

For this participant, the change in perspective was facilitated not necessarily through discussion, but through reflecting on the norming process. This led to a disorienting dilemma in which the participant reexamined their previous comprehension of assessment (Mezirow, 1991). Ultimately, they gained an understanding of how to reliably assess subjective, imprecise material such as an ePortfolio.

In the second comment, participant 15A described overcoming apprehensions about the project itself:

When the concept of ePortfolios was first introduced at [the university], I was skeptical that it would be useful for the students in my department. Now I see how effective the ePortfolio project can be in helping students market themselves and also develop technical website development skills. A student could use an ePortfolio to market themselves to such employers.

This participant placed the student’s perspective at the center of his arguments: it influenced both their initial skepticism and the perceived value of ePortfolios. The data suggests that contact with another the perspective of students is valuable to transformation in thinking and ultimately in teaching (Mezirow, 1991). Other participants described imagining the task of developing ePortfolios from the point of view of a student, often reflecting on the challenges it entailed. For example, participant 2A commented, “It brought home what a complicated and demanding task we are asking our students to complete. It has increased my interest in the project as an essential vehicle for the contemplation and integration of the students’ college experience.” Additionally, participant 10A noted, “I believe I have a greater understanding of the overall goals of the ePortfolio from the student perspective. I had not realized that telling a story/creating an identity was stressed as an overarching goal for students and that reflection was so integral.”

### **THEME 3 – Training (Rubric and ePortfolio Examples)**

In order to enable faculty to effectively assess ePortfolios, significant time in both AI sessions was dedicated to ePortfolio training (Marshal et al., 2017). Training topics included an overview of ePortfolios as a HIP, examples of student ePortfolios, and guidance on the rubric that was developed by the project. When asked for suggestions for the next AI, additional training was



the most common area mentioned. Responses related a lack of understanding with both the instrument of evaluation (the rubric) and its object (the ePortfolio). Thus, training emerged as a theme during our analysis. Individual development and the theory of self-directed learning supports this theme in the data (Brockett & Hiemstra, 1991; Brookfield, 1985; Knowles, 1975). Although this was a university-wide initiative, participants were responsible for their own learning before, during, and after the session. As such, each participant had their own level of self-direction, which allowed for varied learning experiences (Brockett & Hiemstra, 2018).

During the sessions, a rubric was reviewed and shared in order to provide foundational knowledge to the participants, even though they all were involved in the project. The content of the rubric appeared to provide the most comments from the participants. Several remarks from the participants related to problems on reaching consensus on the terminology, as there were different interpretations on meanings and definitions. For example, comments expressed that the rubric was a “little tricky to discern between categories” (participant 3A), or that there was “necessary overlap between outcomes” (participant 10B). These difficulties with the rubric are more significant when considering that, since participants were scoring in pairs, they needed a solid common understanding: significant differences could delay the adjudication process while the pair discussed to reach consensus, and built their individual levels of knowledge (Brockett & Hiemstra, 2018). Participant 25A described this process as taking “a fare (sic) amount of time for everyone to come to same agreement on what it meant.”

During training, participants were provided ample access to example ePortfolios. Yet, when giving suggestions on the AI, participants expressed that they wish they had access “to a wider range of ePortfolios during the training session” (participant 3A), from outstanding to underwhelming ePortfolios: “I would have liked to see what is considered a ‘bad’ ePortfolio along with what is considering a really good one so I can see the extremes and know where I can expect students to fall” (participant 30A).

Participants also mentioned a desire to hear from the AI staff about how they would rate ePortfolios. Participant 16B noted,

I would like to have seen a few more practice ePortfolios of very poor quality. I would like to have read a couple before coming to the institute to get an idea of what the experts rank as Professional versus Beginner.

In addition, Participant 3A commented:

I would have the “experts” provide more detail in the discussion to quicken the norming process. ... having the experts speak to the ratings would have helped the raters get to the “true” score faster, which I believe is the aim of the rubric.

These comments highlight the tension that occurs in authentic learning experiences, in which facilitators have roles as both content experts and directors of participatory, learner-centered sessions. Facilitators need to balance the amount of lecture content with the opportunity for self-direction and discovery (Brockett & Hiemstra, 2018). Authentic instruction includes teaching strategies with plenty of discussions and is present in many faculty development initiatives (Weller Swanson & Kayler, 2010). The learner needs to become more self-directed during the experience, which can cause tensions (Brockett & Hiemstra, 2018). Institutions interested in running these types of authentic learning experiences must face the challenge of pacifying the desire to reach a “true” score. The desired instructional approach is for the participant to realize that a “true” score does not exist, and that the individual is accountable for their own learning and understanding (Mundy et al., 2012). Comfort in using the rubric and scoring should come from developing one’s own knowledge and self-direction and understanding of the reflective process, itself (Brockett & Hiemstra, 2018).

#### **Theme 4 – Best Practices**

One of the most valuable parts of the AI seemed to come from sharing best practices (sometimes called lessons learned) in teaching and learning from the wide variety of participants and disciplines. A valuable faculty development program is one that should follow the adult learning principles of being relevant, current, engaging, and applicable (Knowles et al., 2012).

Several comments from the AI dealt with sharing diverse teaching strategies in relation to ePortfolio, as well as how the ePortfolio improved the participants' understanding and provided them with exposure to alternative instructional practices. To be effective in modern higher education, faculty must be able to support the diverse learning needs of students, and implement relevant and flexible learning curricula (Austin & Sorcinelli, 2013). Participant comments shared recognition of the value for best practices in teaching ePortfolio. For instance, Participant 16A noted, "I have a clearer and more nuanced understanding of the different ways we can envision, talk about, teach, and assess ePortfolios." Participant 12B stated, "I now see a wider application of the project in our curriculum," and Participant 7A supported the thoughts with, "The event gave me many ideas as how I can implement items into my course." Participant 1B concluded, "I gained an understanding of the variety of ways to develop ePortfolios and have a better idea of how to coach students ... I also learned that there are certainly a wide range of experiences across campus."

The AI furnished a basic understanding for implementation of reflection and critical thinking strategies in the classroom and curriculum. Reflection practices modeled in the AI provided participants with an understanding of how to better foster critical thinking and provide relevance to the learner in almost any curricula and classroom (Brookfield, 2017). For instance, comments that supported best practices included, "I feel this mode of learning really rooted in me the values of the ePortfolio and the ways in which I will teach and assess it in my class. Looking forward to using some great new tips" (Participant 35B).

Through the AI, faculty not only deepened their knowledge about teaching and learning: they were able to apply the knowledge in a safe and supported environment. The sessions encouraged experimentation to enhance the curriculum with ePortfolios. The 21<sup>st</sup> century higher education environment will continue to change rapidly. Developing collaborative faculty development programs that support a diverse set of needs might be a best practice for dealing with such change. Offering programs that evolve along with the higher education landscape and incorporate faculty input into their design may deliver the most successful results (Diaz et al., 2009). The AI modeled best practices, as session participants were able to interact with colleagues across disciplines and learn from others whose academic work and teaching strategies were distinctly different. These interdisciplinary skills will be vital in the future for higher education faculty in order to meet changes in the learning environment and differences in student populations from across the globe (Austin & Sorcinelli, 2013).

#### **Further Research**

One area that this study was not able to fully explore was how informal dialogue happens during faculty development initiatives such as the AI. Our data provided some indication as to the potential benefits of informal dialogue, yet did not precisely describe how and when it happens. A deeper examination on informal dialogue and its value might be beneficial to faculty and administrators who wish to understand how to incorporate opportunities for organic, meaningful informal interaction into their programs.

Another insight from this study comes from the difficulties and roadblocks to faculty learning during the AI. We identified issues with training, especially in regards to the implementation of best practices. Studies that solely focus on these challenges and the theory of self-directed learning might yield deeper, interesting results for faculty development.

## Conclusion

This article discussed how transformative learning takes place in an AI designed to train faculty to assess ePortfolios. By analyzing post-participation survey responses, we found indications of changes in thinking by participants. For some, a complete perspective transformation took place, while others suggested more of an ongoing process of change in thinking. The AI described in this article contributed to the transformative learning research in three main ways. First, it allowed for ample discussion and dialogue among participants. Second, it created a diverse, multi-disciplinary environment that exposed participants to a wide range of different points of view. Lastly, the AI served as a showcase of best practices and evidence-based teaching.

Regarding our second research question, the AI described in this article could be improved in two ways. First, by improving training on the scoring instrument (rubric), especially regarding clarification of the terminology and how to score the final assessment. In addition, perhaps providing more examples of ePortfolios and scoring activities would be another way to improve the training. The value and form of concrete examples seems to be another area for research on evidenced-based practices in faculty or professional development.

This case study showed that the AI was much more than content-focused training. Rather than just teaching faculty how to evaluate ePortfolios, the AI introduced participants to colleagues from other programs and highlighted the diversity in ePortfolio implementation. The AI served multiple purposes, including: (1) introducing participants to the concept of ePortfolios in general; (2) enhancing the understanding of the project initiative at the university, and; (3) supporting the use of HIPs in higher education. This institutional dimension of the AI allowed for more in-depth conversations and dialogue about the project than individual, unrelated faculty workshops. The AI enhanced the outcomes of professional development beyond proficiency in evaluation by supporting authentic learning experiences. By exploring the data using the framework of transformative learning theory, our findings suggest that professional development environments that encourage transformative learning by means of discussion, sharing of different perspectives, and reflections on implementation and best practices, yield positive results. These factors can inform researchers and practitioners interested in structuring similar faculty development initiatives.

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