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Development and Sustainability of ePortfolios in Counselor Education: An Applied Retrospective

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This article chronicles the evolution of an ePortfolio as a practicum/internship capstone project used to assess skill development in graduate level counselor education at the University of Nebraska at Omaha. The authors describe the successes and challenges encountered from the implementation of an internally designed and maintained ePortfolio in 2000, with revisions in 2003 and 2010, to the transition to a commercially purchased portfolio product in 2014. Experience demonstrates that an effective ePortfolio implementation requires continuous refinement. Ongoing department reflection is necessary to assure the effective implementation of the ePortfolio for multiple program requirements, while meeting the changing needs of students, faculty, and external accreditors. The process of alignment with changing standards, enhanced reflection and feedback elements, and technical design and support are detailed. This applied retrospective describes the application of the literature over time within the platform designs and evolving teaching practices throughout a decade of ePortfolio implementation.

During the 1980s and 1990s, the University of Nebraska at Omaha (UNO) School Counseling Program generally followed a comprehensive competency guidance and counseling model that is associated most often with the University of Missouri (Lapan, Gysbers, & Sun, 1997). The program utilized a written comprehensive exam exit for demonstration of program mastery. The twenty-first century ushered in an ever growing influence of technology on higher education and the adoption of the first American School Counselor Association's Standards for Students (Campbell & Dahir, 1997). The literature introduced university personnel to the digital portfolio (i.e., ePortfolio) as an innovative and paperless method for students to demonstrate learning and skill mastery. For example, Bayles-Martin (1999) described the portfolio as a format for active learning activities, aligned with the push towards constructivist learning. Barnes, Clark, and Thull (2003) detailed the adoption of a digital portfolio as a program exit requirement within the University of Nebraska at Omaha Counselor Education Program School Counseling Program. The literature at that time suggested that the potential existed for the ePortfolio to address multiple program needs. For example, Hewett (2004) described three basic types of portfolio: documentation, process, and showcase. The initial UNO Counseling Department digital portfolio best fits the category of documentation portfolio, with an emphasis on demonstration of growth from "knowledge about" to application of specified standards.

More than a decade of using an internally designed and managed ePortfolio as an evaluation measure in the UNO Counselor Education program provided experiences ranging from unexpected successes to unforeseen challenges. The project evolved from an in-house ePortfolio completed during a practicum field experience by students in the secondary (grades 7-12) counseling track to a K-12 School Counseling Program internship capstone project. More than 170 portfolios have been created, reflected upon, and assessed from 2000 to 2014. Successful completion of the capstone ePortfolio served as an appropriate component of the comprehensive exam process for program completion to formalize and standardize program exit requirements (Pitts & Ruggirello, 2012).

Faculty identified immediate program benefits for assessing student learning. The innovative collection and selection of artifacts in the ePortfolio presentation format grew from a novel idea to a key component of the UNO Counselor Education program. Use over time provided evidence of exceptional adaptability, while exposing very real challenges related to the sustainability of technology to support the ePortfolio. Hall, Byszewski, Sutherland, and Stodel (2012) noted that sustainability issues may include adapting to student and faculty feedback, rethinking technology components, and adjusting to new needs for professional development. These challenges are described for each of the ePortfolio versions. This applied retrospective further identifies important ways in which the ePortfolio format has allowed educators to adapt to changing standards and technical support, while answering the increased demands for accountability measures that include student-learning outcomes (Table 1).

This applied retrospective details the design and implementation evolution through each ePortfolio version. Additionally, the relevant literature that informed each revision is compared and contrasted as a means to reflect upon the constants and changes in the utilization of ePortfolios in education over the decade. Critical sustainability factors are analyzed through the lenses of the literature review and the UNO Counseling

Table 1
Summary of UNO Counseling Department ePortfolio Evolution

ePortfolio version	Distinction from previous format	Technical support	Key considerations
1.0	Provided a digital platform for documentation of practicum/internship experiences. Provided a link between counselor candidate experiences and ASCA National Standards for Students (Campbell & Dahir, 1997)	Internal programmers supported the creation of the ePortfolio. Responsive support and robust ability to customize were provided by internal technical support.	Initial version lacked fields for student reflection. Feedback to the students was text-based and often independent of the portfolio.
2.0	Added a field for candidates to enter reflections related to experiences. Created content links and graphic interfaces to align with the ASCA (2012) National Model.	Internal programmer supported the portfolio. Programming was FileMaker Pro based.	Opportunities for timely feedback to support authentic reflection were very limited. Growing enrollments negatively influenced the degree of faculty response to portfolio artifacts and reflection.
3.0	Added an interactive feedback feature that allowed faculty to respond to candidate work and reflections throughout portfolio artifact creation.	Internal programmer supported the portfolio. MySQL programming platform allowed for expanded features.	Increased functionality increased summative and formative evaluation of portfolio artifacts. New platform resulted in the loss of some archives. Significant ASCA (2012) Model changes created a need for portfolio 3.0 adaptation.
4.0	Rubric scoring internal to the portfolio and unique to each artifact. Ability to collect and report quantifiable data is enhanced. Professional portfolio format is an option.	Personnel changes made it difficult to support MySQL based ePortfolio. Transitioned to a commercial portfolio product selected by the College of Education.	Student fees required to purchase portfolio product. Diminished dedicated technical support existed. Relied on the continuation of college contract with vendor. Increased functionality required faculty commitment to instruct students in the use of a multiple audience portfolio.

Department's experiences in developing and sustaining an ePortfolio in higher education. This article demonstrates that an effective ePortfolio implementation must be continuously refined and adapted to reflect student and faculty learning about ePortfolio utilization and to meet the changing external factors, such as national counseling program models, student standards, and external accreditation requirements.

ePortfolio 1.0—Initial Digital Portfolio

In 2000, faculty, staff, and students associated with the Counselor Education program at UNO began the process of developing web-based professional portfolios for secondary school (grades 7-12) counseling students (Barnes et al., 2003). Journal articles from the era supported the positive effects of portfolio assessments to showcase students' accomplishments and mastery of standards (e.g., Baltimore, Hickson, George, & Crutchfield, 1996; Boes, VanZile-Tamsen, & Jackson, 2001; Carney, Cobia, & Shannon, 1996; Rhyne-Winkler & Wooten, 1996). Authors described the portfolio as an active, instructional activity incorporating collecting, selecting, and reflecting upon a body of work (Barrett, 2001; Bayles-Martin, 1999).

The initial digital portfolio (ePortfolio 1.0) had three primary purposes. First, students created a portfolio as a means of demonstrating competence and experience in an array of related professional activities. Second, students linked these experiences to the American School Counselor Association's Standards for Students (Campbell & Dahir, 1997), demonstrating a wide breadth of appropriate practicum experience for a professional school counselor (Figure 1). Finally, students utilized the ePortfolio to reflect upon developmental growth and demonstrate skill application. The ePortfolio provided a new platform for students' demonstration of growth over time and placed new teaching expectations on course instructors, as well.

The ePortfolio 1.0 functioned as a summative tool to assure that counseling degree students included artifacts for all school counseling program areas, as noted in Figure 1. Additionally, it served as a formative tool where students thoughtfully selected and shaped internship experiences to demonstrate skills application in a school counseling setting (Rita, 2001). Faculty utilized the ePortfolio to measure the counseling students' developmental growth and skill application as part of the program's comprehensive exit requirements. However, within the first two years, faculty realized that ePortfolio 1.0 lacked a key element needed to support candidates' continuous improvement. The design needed an adequate field in which students could record reflections concerning activities, competencies, and experiences. As Baltimore et al. (1996) noted, the assessment of reflections served to inform the student's developmental growth from knowledge awareness to skill implementation.

ePortfolio 2.0—Reflection Field and New ASCA Model Adaptation

In spring 2003, with the aid of an in-house programmer, a reflection field was added that allowed future students a platform (i.e., text field) to record reflections for each artifact. Research noted evidence of a relationship between advanced knowledge application and reflection (e.g., Leung & Kember, 2003). University supervisors emphasized that thoughtful examination of what the counseling students learned from the experience was more valued than the success or failure of the event itself. The students' reflection statements validated that "developing the electronic portfolio not only demonstrates past growth and learning but also generates learning in and of itself" (MacDonald, Liu, Lowell, Tsai, & Lohr, 2004, p. 54).

Additionally, 2003 brought the introduction of the American School Counselor Association's National Model (Bowers & Hatch, 2002). This broad and comprehensive structure for counselors and counseling programs provided a further opportunity to define required ePortfolio evidence. The ePortfolio incorporated several elements described by MacDonald et al. (2004), which included a selective group of artifacts demonstrating student competence and growth, a display of files and reflection, and the provision of an easily accessible exhibit of the student's professional growth and competence.

Although a much improved version, ePortfolio 2.0 lacked a digital method for instructor feedback during artifact development. Wetzel and Strudler (2006) reported that detailed and continuous feedback contributed to greater learning from and value in completion of an ePortfolio capstone project. A tedious process provided feedback on either excellent or insufficient entries by copying work from the ePortfolio and pasting that selection into a word document. The instructor then input comments as shown in Figure 2. A scoring rubric used for final ePortfolio approval provided students with general expectations, yet an effective and efficient way to guide the artifact development process regarding the quality of the work was unavailable electronically. Feedback typically acknowledged efforts at predetermined checkpoints and, in some cases, explained a lower score in a particular area of the rubric. Interactive feedback between faculty and a student occurred in informal conversations during class or in a more formal advisement session.

Increasing numbers of students' portfolios, multiplied by the hours needed to complete the cut-and-paste feedback process, made providing adequate feedback to students on ePortfolio artifacts unmanageable. The counseling program's ePortfolio required a great deal of student time to complete and instructor time to review. Both faculty and students informally described the connections among the amount of time needed to complete the portfolio process, the impact of detailed faculty feedback on the learning growth, and the sense of satisfaction derived by both faculty and students throughout the process. Instructors agreed on the perceived value of the capstone requirement, yet recognized that the ePortfolio platform needed technical updates. Despite refinements in the framework, there remained a need for ongoing technical support from programmers.

ePortfolio 3.0—Interactive Instructor Feedback

The College of Education technology department hired a programmer to take on college projects in technology in 2010. The programmer possessed mastery of specific programming languages (i.e., MySQL) that previous support staff did not possess. In collaboration with the school counseling faculty responsible for supervising the ePortfolio project, the

Figure1

Student Competence Documented by Alignment with Standards

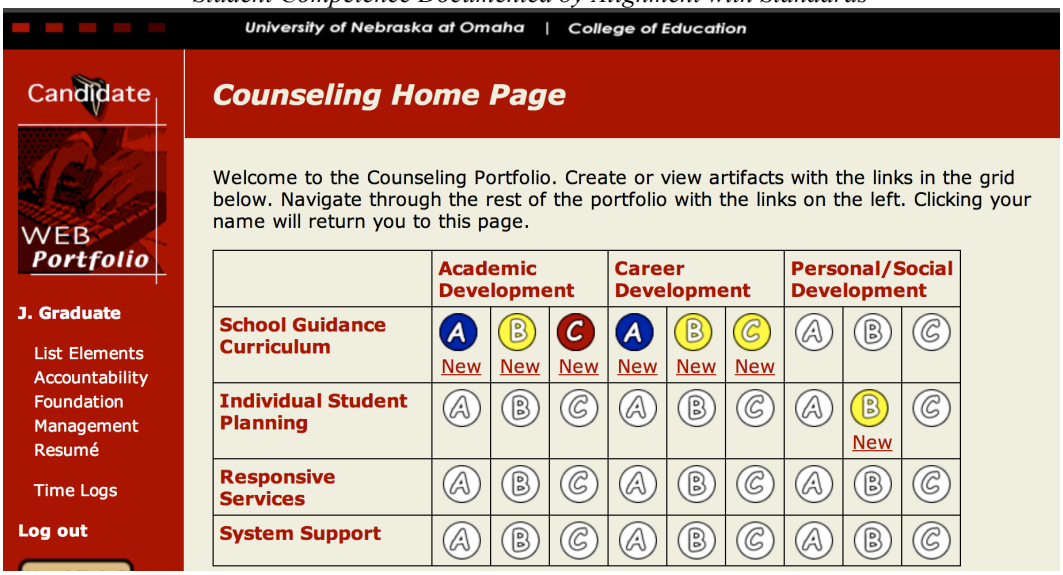

Figure 2

Example of the Cut-and-Paste Paper Feedback Process for ePortfolio 2.0

Example of Positive Feedback for Artifact Approval

Component: Response Services
Student Standard: Academic Standard A
Full Standard: Students will acquire the attitudes, knowledge and skills that contribute to effective learning in school and across the life span.

Implemented and Facilitated an Early Bird Group for 4th-6th Grade Students

With high expectations from their peers for the 6-week period, they rose to the challenge. After our group ended however, several of the students regressed while the remaining students improved their average days of attendance. I continued to motivate the students by greeting them in the mornings until I was given a breakfast "fair share" duty in the cafeteria. Next year, I am going to request an alternative duty that would allow me to be available to greet students in the mornings.

Reviewer Comments: *The group is an excellent example of using data to select group members. Glad to see that this was effective for even a portion of the students. It is also a good example of using the "fair share" times as opportunities to continue counseling.*

Example of Feedback for Artifact Revision

Component: Curriculum
Student Standard: Academic Standard C
Full Standard: Students will understand the relationship of academics to the world of work, and to life at home and in the community.

Partnered with outside agencies to be a facilitator for workshops for students in 10th through 12th grade

Provide opportunities for students to attend workshops geared to youth development and participating in those workshops.

Reviewer Comments: *As written, this artifact does not satisfy the requirement of demonstrating what you delivered or co-facilitated to meet this academic standard. Please either edit current artifact descriptor to explain its selection or choose another experience. Also please edit spelling errors.*

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programmer responded to a requested list of features for the ePortfolio. A new color-coded system noted the degree of completion, review, revision, and final approval for each of the thirty-six entries. The addition of a comment box for each artifact element provided continuous electronic feedback interaction between student and instructor. The impact of this interactive ePortfolio 3.0 was manifested in the next group of students. Everything from grammar errors and element design flaws to inaccessible supporting web files were noted by the instructor through the continuous feedback loop and subsequently revised by students.

Students' comments to instructors suggested that the frequent and substantive feedback on artifact content resulted in a more informed and intentional artifact development, which maximized learning. The quality of descriptive content improved as comments encouraged, questioned, sought clarification, and supported a process of artifact completion demonstrating student growth. As Strudler and Wetzel (2011) noted, "when implemented well, many students and faculty believe that the benefits derived do justify the costs" (p. 167).

ePortfolio 3.0 contained a reflection section with a continuous feedback process between the faculty and students. An analysis of the previous ePortfolio 2.0 reflection section revealed that typically the entry was a summary of the activity description, as faculty had not incorporated any specific reflection model to guide student responses. Those reflections lacked "a way for them to both learn and provide evidence of their capacity for critical thinking, analytic reasoning, and integrative learning" (Rhodes, 2011, p. 9). The discovery of the Gibbs (1988) model of reflection assisted faculty in providing a more structured approach with a series of questions to guide reflection based upon Gibbs's cyclical sequence of describing, feeling, evaluating, analyzing, concluding, and action planning.

Students utilized the following questions to guide their reflective practice for each artifact: What would I do the same? What would I do more of? What would I do less of? What am I proud of? This process provided examples of students' professional growth for potential implementation of and improvements in school district counseling programs. Students developed reflections beyond general comments, such as "kindergartners liked the lesson" or "I was surprised by how much time it took to break into small groups," to create an in-depth examination of the artifact experience in both current and future implementations. The reflections demonstrated growth from knowledge about to actual implementation of a school counseling program.

Reflections grew in length and, more importantly, in thoughtful depth, supporting Scott's (2010) finding that "reflective practice contributes to learning" (p. 433). Faculty supervisors noted that the reflection section became a key element in terms of assessing progress. Students moved from merely describing knowledge about school counseling through random activities to the incorporation of the reflection model elements of evaluating, analyzing, and planning for artifact application in the implementation of a school counseling program, as shown in Figure 3.

Scott (2010) suggested further that the generalization and application of reflection developed self-regulation that assisted the students in determining useful and effective practices in a profession where expectations for behavior change continuously. The *ASCA National Model: A Framework for School Counseling Programs* (American School Counselor Association, 2012) emphasized data driven programs. Beginning in 2013, students described the formal and informal data utilized prior to responding to the reflection guiding questions. Initial review suggested enhancement both in reflection and intentional application of data throughout artifacts. MacDonald et al. (2004) recognized early on in the use of portfolios that one objective was to look back and reflect upon what had been learned and achieved. Additionally, the reflective activity provided the means to identify gaps and consider future development and opportunities for growth.

Faculty and students utilized ePortfolio 3.0 as a capstone school counseling program project with few adjustments until 2014. The UNO College of Education purchased a commercial product portfolio, encouraging departments to incorporate the ePortfolio into coursework and/or capstone projects. In December 2013, counseling faculty learned that ePortfolio 3.0 would no longer be supported with server or technical assistance. At the same time, faculty recognized the need for an ePortfolio platform revision to incorporate the language of the ASCA (2012) National Model. Additionally, an upcoming CACREP (Council for Accreditation of Counseling and Related Educational Programs) reaccreditation process provided an opportunity to review current literature regarding the use of an ePortfolio for both program and accreditation purposes. Yancey (2009) noted that ePortfolio technology considerations included, in addition to cost and ease of use, effective program support. Being unattached to the platform created an opportunity to see how a commercial product could support artifact development requirements and sustain the purpose and value of the ePortfolio experience.

ePortfolio 4.0—Transition to a Commercial Product ePortfolio

The Counseling Department began work with its first commercial ePortfolio product, ePortfolio 4.0, in the spring of 2014. A professor from the teacher

Figure 3
Example of the Reflection Section from ePortfolio 3.0

Element Status: Approved with comments.

Delivery Component: School Guidance Curriculum

Standard: Academic Development C

Students will understand the relationship of academics to the world of work, and to life at home and in the community.

Title: Facilitated a classroom lesson on the responsibilities of student workers to first graders to review the importance of following rules, hard work, and helping others.

Reflection

Being able to sit and truly listen can be a difficult task for any age, let alone first grade. However, this is an important skill to have and practice at a young age. The students enjoyed the story of Howard B. Wigglebottom. They were able to pay attention to the story and practice the skills afterwards of what it takes to be good listeners. Next time, I will refine the worksheet a bit for the students to have a better understanding of what to do. The students seemed unsure of what I was wanting on the worksheet. I found myself going around to each table and almost telling them what to add. To revise the worksheet, I plan on adding word bubbles around each picture I want them to draw. For example, "What are your hands doing?", "What are your eyes doing?" and "What is your mouth doing?" I would also spend more time explaining to students how to fill this worksheet out before letting them start it. I would also send home a letter to parents explaining the key concepts of sitting and listening in school and at home.

eduation department, working closely with the counseling faculty and a commercial vendor representative, developed a template for artifact organization and development utilizing the ASCA (2012) National Model language. The ePortfolio retained the goal of students' demonstration of learning and growth from knowledge awareness to skilled practice. Additionally, the commercial product ePortfolio platform provided an opportunity to utilize these artifacts to demonstrate student learning outcomes for the reaccreditation requirements of the CACREP student standards (CACREP, 2009).

Even though the University system selected and encouraged departments to use the commercial product, the authors conducted a literature review regarding higher education utilization, ongoing value, and enhanced features of a commercial ePortfolio product to inform the implementation process. The literature review focused first on the use and ongoing value of an ePortfolio in shaping student learning. Clark and Eynon (2009) reported that higher education's use of the ePortfolio tripled during that decade, with 50% of institutions using ePortfolios in some fashion. Kahn (2014) stated that the use of ePortfolios had increased sharply since 2010, with a growing number of commercial portfolio product vendors. Kahn referenced the *International Journal of ePortfolio* as an online outlet for researchers and practitioners to share work. With over 40% of higher education institutions reporting utilization of ePortfolios, the Association of American Colleges and Universities recognized ePortfolios as an important strategy for the integration of student learning (Rhodes, Chen, Watson, & Garrison, 2014). Brown, Chen, and Gordon (2012), in results of the second annual Association for Authentic, Experiential, & Evidence Based Learning (AAEEBL), noted, among other findings, an increase in ePortfolio services across 2- and 4-year, public and private universities.

In a Connect to Learning project, Eynon, Gambino, and Török (2014) found that a majority of students responded positively to survey questions focused on whether or not building an ePortfolio helped them succeed as students and be more aware of their growth as learners. Discussions among UNO faculty and students and a department CACREP reaccreditation self-study survey completed by graduating students in 2014 provided direction for the ePortfolio 4.0 platform design elements. Students' anonymity provided the freedom to complete each statement frankly. Analysis of these sentence stubs formed the themed responses

from 20 UNO graduate students found in Table 2 and served to inform the purposeful implementation of ePortfolio 4.0.

The themed responses and literature review resulted in faculty viewing the transition to a commercial product ePortfolio as an opportunity to enhance the student learning experience. Faculty wanted to address students' displeasure with how time-consuming and frustrating the overall portfolio experience had been for some. Students supported and valued the interactive feedback with terms such as helpful, valuable, and constructive. Similar comments, describing the value of reflection as a means of both active self-assessment and reflection to inform the practice of school counseling, aligned with several articles. For example, Rickards and Guilbault (2009) suggested that the feedback and reflection elements involved analysis, interpretation, and construction for the future. The analysis of the survey themes in Table 2 and the literature review enhanced the faculty focus to include both the ePortfolio 4.0 platform implementation and how faculty could scaffold more intentionally the development of reflective ePortfolio artifacts, as described by Roberts and Maor (2012).

The responses related to interactive feedback in Table 2 focused on the value of specificity, fairness, and positive emphasis to inform artifact revisions. Faculty remained committed to a timely, ongoing, and substantive feedback process, which Gaitán (2012) described as the most efficient form of feedback. In addition to a process for instructor feedback across elements of an artifact, the commercial product included a feature for students to submit an artifact to a peer for feedback and 360 review. This feature provided an electronic opportunity to strengthen students' skills in looking for critical elements in the artifact, practicing constructive feedback, and seeing the work of other students to enhance the self-assessment of their own work.

A review of the literature included both positive outcomes and cautions regarding the peer review practice. An element of Schön's (1987) theory described the importance of collaborating with others when reflecting on action. Kao (2013) cautioned that threats of unfairness, distorted scoring, and quality of comments required faculty intentionality in the peer review process design. Kao (2013) also noted, however, that a number of studies reported positive responses for and results from peer assessments, particularly when peer assessment tools were developed and reviewed with students. The Kao (2013) article included six steps for faculty consideration to improve the quality of peer review. Based on this literature, the UNO Counseling Department agreed to study further the requirements of a peer feedback interaction to purposefully design the peer feedback protocol.

The ePortfolio 4.0 platform included the capability of incorporating the UNO ePortfolio scoring rubric, provided in Figure 4, into each artifact developed by students. This electronic feature afforded ongoing, rubric-based feedback to inform and improve artifact development. Research findings about the primary value of the rubric were that communicating faculty expectations and engaging with students in the assessment of their professional growth supported a continuous communication process (Dalal, Hakel, Sliter, & Kirkendall, 2012). The access to quantitative data from the scoring rubric provided faculty with a new means of assessing students' learning.

Specifically, the data evaluation from the electronic scoring rubric provided one method of addressing the challenge that ePortfolio effectiveness relied too much on theory and assumptions rather than empirical evidence and data-supported research (Bryant & Chittum, 2013). Rhodes (2011) suggested that rubrics exhibit content validity when "broadly articulated and accepted by faculty" (p. 10) in multiple areas of learning, creating "standards without standardization" (p. 10). The ePortfolio 4.0 platform enhanced content validity by using the scoring rubric throughout the artifact development process. The use of the ASCA (2012) National Model standards for every artifact design and revision resulted in consistent and rigorous evaluations, demonstrating inter-rater reliability. These data points also provided a response to the CACREP recommendation that an increased use of formal assessment tools be a part of the reaccreditation process.

A themed response from the UNO student survey suggested that the reflection element provided an opportunity to (see Table 2):

> reflect on what I was proud of and what I plan to change or continue in the future, a reason to consider the successes or failures of each item, and capture useful tips for next time demonstrated [*sic*.] the ongoing benefits of the reflection section.

The recent literature has included many articles on reflection and the skills required for reflective writing. Research supported the value of student reflection within artifacts, particularly when enhanced with ongoing dialogue between student and ePortfolio reviewer. Jenson (2011) reviewed literature and developed a process to move reflective writing from surface to deeper learning, which included reflection as an element for every assignment within a course. Hallam and Creagh (2010) noted that little in the literature on reflection came directly from students. The authors proposed that each semester a questionnaire capture students' expectations and that a post-semester questionnaire focus on students' experiences. Hallam

Table 2
Themed Responses from Students Regarding the ePortfolio Experience

Reflection statements	Students' themed responses
The overall portfolio experience . . .	Time consuming, frustrating, overwhelming, grueling, arduous, and intimidating were adjectives found throughout intern responses.
	Locating and doing the lessons to meet the student standards, seeing the completed portfolio and having a place to find lessons, becoming more familiar with the standards, focusing the experience of the counseling program, and helping to reflect on everything accomplished were common responses.
	Would be more beneficial if "I could take it with me and display it for future jobs or be able to share with classmates, and the desire to have been working on it throughout the program are requests being addressed in portfolio 4.0.
The value of the feedback textboxes . . .	Helped narrow down areas for improvement, expectations, changes needed, and where certain items fit were common descriptors under the general theme of "very helpful."
	Valuable, positive, directive, fair, targeted, specific, and constructive were common adjectives in responses.
The reflection section provided . . .	A space to state feelings about the artifact, a chance to think about positives and negatives of lesson, a good way to evaluate a piece of evidence, an opportunity to think about whether the overall objective had been met were common descriptions of what the reflection section provided.
	A chance to reflect on what I was proud of and what I plan to change or continue in the future, a reason to consider the successes or failures of each item, and capture useful tips for next time demonstrated the ongoing benefits of the reflection section.
The most beneficial aspect of the portfolio . . .	Specific guidance and usage of the ASCA model, focused attention paid to all elements of the ASCA model, exposing the skeletal parts of the ASCA model were direct comments regarding the ASCA model framework.
	Identifying how and what to use to meet student standards, dividing up tasks to fit categories, seeing lessons for each domain, and seeing all the ways to use standards in a program describe the practical aspects of the portfolio experience.
	The opportunity to put in writing the many things I have accomplished in my first year on the job with specific feedback was described as beneficial.
The biggest challenge of the portfolio experience . . .	Time, placing things in the correct domain, finding 36 different items, identifying the student standards for system support, and identifying individual student planning artifacts for elementary students were common challenges.

and Creagh (2010) further suggested that comparisons between beginning and mature users could provide access to student' voices regarding their growth in learning over the course of the program. Articles focused on specific rubric development for self-assessment and reflection (Rhodes, 2014; Rickards & Guilbault, 2009). Dalal et al. (2012) found a gap in research on reflection and application and provided a model, Reflection Depth Ratings: Training Session Information, to teach students how to assess reflection and enhance learning through peer review. Rickards et al. (2008) defined the term deliberative inquiry process as "how students construct their learning from artifacts and how these processes might be understood through existing theoretical frameworks" (pp. 38-39). The article described the qualitative analysis of student work and interviews, arriving at the conclusion that it was possible to examine the depth of integrated activity reflection from theory to practice. Research suggested a potential new emphasis and value of the ePortfolio reflection component beyond the contexts of evidence of course learning and field experience application.

The faculty's reflection on the reflection literature itself provided an additional context in which to understand and evaluate students' ability to be successful practicing school counselors. UNO counseling faculty agreed to incorporate specific reflection assignments throughout coursework, including an emphasis on teaching a reflective writing component. The Counseling Department faculty utilized the more recent reflection literature articles, along with the Gibbs (1988) model of reflection, to propose the 2014-2015 agenda for a professional learning circle, referred to as a community of practice at UNO, to develop faculty's knowledge and skills related to the teaching and reviewing of students' reflections as

Figure 4

Scoring Rubric for the University of Nebraska at Omaha ePortfolio

University of Nebraska at Omaha Advanced Internship Scoring Rubric
Portfolio Demonstration of ASCA Model Delivery System Components

	4	3	2	1
Content Descriptions	Covers topic in-depth with supporting details and examples related to the candidate's professional experiences.	Includes essential information about the candidate's professional experiences.	Includes limited or basic information about the candidate's professional experiences.	Contains no information about the role of the candidate's professional experiences.
Experience Supported by Artifacts	All professional experiences were well supported with relevant statistics, illustrations, and/or examples.	A majority of the professional experiences were well supported with relevant statistics, illustrations, and/or examples.	A few of the professional experiences were well supported with relevant statistics, illustrations, and/or examples.	There were no supporting documents provided to further support descriptions of professional experiences.
Relevance of Supporting Material	All supporting elements had a function and clearly served to illustrate some aspect of the experience.	Most supporting elements had a function and clearly served to illustrate some aspect of the experience.	Few supporting elements had a function and clearly served to illustrate some aspect of the experience.	Supporting documentation was confusing and failed to further illustrate aspects of the experience.
Grammar & Spelling	Writer makes no errors in grammar or spelling that distract the reader from the content.	Writer makes 1-2 errors in grammar or spelling that distract the reader from the content.	Writer makes 3-4 errors in grammar or spelling that distract the reader from the content.	Writer makes more than 4 errors in grammar or spelling that distracts the reader from the content.
Reflective Statements	All reflections reveal meaningful insights that result in changes to future practice.	A majority of reflections reveal insights that are likely to influence practice.	Reflective statements demonstrate little depth and do not influence practice.	Reflections were not provided.
Overall Effectiveness	The portfolio clearly demonstrates the candidate's role in professional school counseling activities.	The portfolio provides examples of the candidate's role in school counseling activities.	The portfolio provides examples of activities that are not necessarily specific to school counseling.	The portfolio fails to provide evidence of competence in school counseling activities.

Overall Score:

Comments:

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evidence of skill development. The faculty expressed specific interest in the concepts of depths of learning model and student voice analysis through the use of pre/post questionnaires.

Chatham-Carpenter, Seawel, and Raschig (2009) stated that higher education institutions successfully use ePortfolios to "enhance student learning, conduct authentic program/institutional assessment, support students as they prepare for future careers, and meet certification standards" (p. 437). Utilizing the commercial portfolio throughout the students' graduate school counseling program coincided with the increasing requirement of the CACREP accrediting organization that programs demonstrate that students really learn what standards propose and faculty expect. With these research findings, the faculty decided to utilize ePortfolio 4.0 both for CACREP reaccreditation and the UNO Counseling Department's capstone project. Students would have ePortfolio course assignments aligned to CACREP standards for student learning outcomes. These assignments could potentially become artifacts for the ASCA National Model-aligned counseling program ePortfolio exit requirement.

A focused literature review provided faculty with valuable research regarding a multiple use ePortfolio. Gallagher and Poklop (2014) discussed the challenges of multiple audience portfolios. The authors cautioned that, while the ePortoflio's capacity to write for multiple audiences could seem like a great opportunity, it could also lead to a confusing and frustrating ePortfolio experience. Gallagher and Poklop (2014) defined four distinct ePortfolio types and challenged instructors to provide instruction that assisted students in writing for multiple audiences. The article further suggested that a dual purpose ePortfolio required intentional communication between faculty and students to avoid audience interference, the result of students unsuccessfully attempting to meet the expectations of more than one audience in a single ePortfolio artifact. Even though the commercial product provided a unique opportunity for a multiple use ePortfolio at the university, based on the literature the faculty decided to develop prompts to assist students in writing for multiple audiences to minimize the confusion and frustration noted by the researchers.

Additionally, the new platform provides students with opportunities to develop a more unique presentation of artifacts for employer interviews and other external uses. Yancey (2009) noted that students were more enthusiastic about the ePortfolio project knowing that they were able to personalize the ePortfolio in presentation style and utilize artifacts and reflection across experiences in the graduate program and the profession. Research as early as that by Hewett (2004) noted that sharing ePortfolio artifacts via the Internet provided employers with a way to get to know the candidate's philosophy, decision making through reflective responses, and quality of finished products. The sharing of artifacts with a potential employer involved an additional voice for students' consideration and faculty support.

The review of current literature demonstrated that the "ePortfolio world is arguably multifaceted" (Hallam & Creagh, 2010, p. 2). The transition to ePortfolio 4.0 initially appeared to be one of moving from a longstanding, in-house platform to a commercial product portfolio, focusing on platform compatibility. Instead, this multifaceted transition included intentional faculty shifts in teaching skills, such as reflective writing, and more rigorous assessment and evaluation of ePortfolio effectiveness. The UNO counseling program ePortfolio 4.0 goals and objectives evolved into a model in which students create projects for specific courses that provide evidence of skill acquisition associated with those courses (e.g., small group lessons for the school group counseling course). Students then select activities from their field experiences as artifacts for the capstone ePortfolio, reflecting upon growth from knowledge and skills about school counseling to the actual program implementation experience. Using the ePortfolio throughout the counseling program establishes a continuous emphasis on skill acquisition and reflection. It also provides students with more flexibility, allowing them to select from a number of artifacts to demonstrate learning, progress, and proficiency in the capstone product.

The value of the ePortfolio capstone project for graduating school counselors at the University of Nebraska at Omaha is captured in the term integrative learning, suggesting that an ePortfolio integrates course learning with field experience in a way that enhances the goals of a higher education counselor education program (Chatham-Carpenter et al., 2009). Additionally, ePortfolio 4.0 addresses the comments and requests of UNO students regarding the desire to have a longer period of time throughout the practicum and internship sequence to develop the artifacts from coursework and field experience to meet the ePortfolio capstone project requirements.

Recommendations and Conclusions—A Decade of Learning

The development and sustainability of an ePortfolio in counselor education remains a complex endeavor. The process of research and reflection, along with the opportunity to consider what the authors learned over time, reveals several key requirements for success, including: faculty flexibility and commitment to the value of the ePortfolio; university support (technical and monetary); onsite technical support in

design and implementation; and ongoing dialogue between students and faculty.

Key considerations and recommendations include the following: First, engage early in constructive conversations to consider fully the time required for development of an ePortfolio. Second, ensure that the design and technical capacity supports the expectations of both students and faculty, including the number and type of digital artifacts, feedback mechanisms, and methods to assess learning outcomes. Third, identify the clear purpose(s) of using an ePortfolio, such as demonstrating program exit requirements (summative) or shaping student learning (formative). When multiple purposes are present, such as accreditation efforts, assure that the demands for each can coexist. Fourth, identify necessary student skills and nurture their development throughout their coursework in preparation for meeting the ePortfolio requirements. For example, teach and model the use of a feedback and reflection cycle. Fifth, solicit feedback from faculty and students throughout the development and implementation stages of an ePortfolio. Feedback directs revision and instills confidence that the value of the experience for students and faculty is maximized. Sixth, recognize that technology, technology support, and related funding sources drive the sustainability of an ePortfolio. The documentation of student learning, in pragmatic terms, may be secondary compared to administrative costs. Seventh, maintain collaboration and communication with key stakeholders, as successful management of an ePortfolio is not an individual venture. Finally, implement a structure to engage periodically with the literature addressing ePortfolio evolution and specific elements such as reflection and feedback.

An unexpected result of the review of the literature for ePortfolio 4.0 implementation was the excitement generated among faculty regarding the intentional teaching opportunities and data analysis available to strengthen the value of the project for student integrated learning. The literature on reflection led to a commitment from faculty to include reflection prompts for all major assignments throughout the school counseling graduate program. The current reflective practice incorporates the *on-action* approach (Schön, 1983), in which ePortfolio entries are recorded after the experience for a program requirement. The *in-action* approach (Schön, 1995), where the reflection is written during the activity to focus on the unexpected, provides a new methodology for reflective writing activities throughout coursework. The review and utilization of additional reflection rubrics, student training for rubric peer review, and periodic assessment of student satisfaction are all program additions directly related to the literature review.

The winter 2014 edition of *Peer Review* focused on ePortfolios past, present, and future. The guest editor, Rhodes (2014), responded to the question, "Why bother with ePortfolios?" by describing the potential benefits and uses for multiple stakeholders. Faculty members incorporate course, program, and institutional learning outcomes through multiple student artifacts. Students demonstrate their very best work over time, resulting in a final product showcasing their accomplishments and growth. Programs and institutions have authentic products of student work related to program and accreditation accountability. Bass (2014) suggested that ePortfolios are "not the hottest thing in higher education" (p. 35) but are instead "agents of integration" (p. 35). Bass concluded that ePortfolios uniquely display the development of the whole student and the distinct culture of a local higher education institution. The UNO Counseling Department is the first of the graduate programs at this institution to develop and implement an ePortfolio for multiple audiences. Cross-departmental collaboration to expand the integration of ePortfolio utilization in multiple graduate programs in the UNO College of Education is a goal.

The UNO Counselor Education Department's decade of commitment to the incorporation of the ePortfolio for program assessment qualifies as more than following a trend and, instead, recognizes the opportunities for program integration through the latest adaptation of the ePortfolio 4.0. Every innovation increases the complexity of quality utilization of an ePortfolio in higher education. Faculty moved from angst regarding the platform change to anticipation of an even more effective ePortfolio experience for students. Students' ePortfolio artifacts and process insights continue to provide the rationale and drive necessary to engage in the complex development and sustainability of ePortfolios in counselor education.

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