Using Introductory Videos to Enhance ePortfolios and to Make Them Useful in the Hiring Process

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This article explores whether or not there is a more effective way to develop and present portfolios to make them more meaningful and usable in the hiring process. An example of a pilot ePortfolio, with an accompanying three to four-minute introductory reflective video highlighting the pre-service teachers' beliefs about education, was shown to 15 practicing public school principals who represented a variety of school sizes, community locations, and grade levels. Semi-structured interviews addressing the potential use of ePortfolios and introductory reflective videos in the hiring process were conducted with participating principals. This article includes descriptions of how principals may make use of ePortfolios in selecting teachers. For instance, in contrast to the extremely minimal use of binder-based and traditional electronic portfolios, 93% of principals interviewed indicated they would use the introductory videos contained in the ePortfolios during the hiring process. This article includes a number of additional findings supported by rich qualitative data, suggestions for ways to improve on the pilot ePortfolio, and links to an example of the pilot ePortfolio (http://geturl.uww.edu/1o3) and to an example of the next version of the ePortfolio (http://geturl.uww.edu/1o2).

In most schools of education, portfolios are used to showcase students' teaching talent. On the one hand, many students' believe that if they create an outstanding portfolio that displays them in a favorable light, they will likely acquire a teaching job. On the other hand, principals report not having enough time to review portfolios during an interview (Mosely, 2005; Temple, Allan, & Temple, 2003; Whitworth, Deering, Hardy, & Jones, 2011), so that all too often the hard work of the student goes largely unnoticed. Herein lies the question. How can portfolios be designed to be more useful in the hiring process?

The purpose of this study was to investigate how ePortfolios might be designed to be more useful in the hiring process. The primary research question was: How do principals view and indicate that they might use the current pilot version of an ePortfolio, with an introductory video, in the hiring process? In particular, would an introductory video of students discussing their beliefs about education make the ePortfolios more valuable to principals? In addition, the researchers asked principals for recommendations for improving the ePortfolio so that it might be more valuable to potential employers.

Literature Review

What are Portfolios, and What Should Be Included in the Portfolio Quiver?

Portfolios are commonly used in graduate and undergraduate programs in a variety of disciplines, such as architecture, art, and elementary education. A portfolio has been described as a "systematic and purposeful collection of work samples that document student achievement or progress over a period of time" (Yao et al., 2008, p. 10). In the educational profession, portfolios are required by the National Board for Professional Teaching Standards for national certification (Zeichner & Wray, 2001). In teacher education, portfolios are simply containers that hold various examples of teacher candidates' work and learning, as well as teaching artifacts from student teaching. Early portfolios were generally written on paper and bound in three-ring binders.

Research has been conducted on the different types of materials that should be included in a portfolio. In surveying 15 representatives from Midwest colleges and universities, Boody (2009) reported that portfolios should include basic credential file items, such as transcripts, letters of recommendation, and student teaching evaluations. Antonek, McCormick, and Donato (1997) were much more specific and extensive in detailing portfolio contents. They labeled the portfolio contents "evidence" of teaching and said that portfolios should include

> sample lesson plans, notes from conferences with the cooperating teacher or [university] supervisor, photographs of bulletin boards, sample tests, quizzes, worksheets, activities, observation notes, evaluations of teaching, summaries of articles that directly informed teaching, examples of student work, evidence of school involvement, evidence of class management, and video and audio tapes of a lesson. (Antonek et al., 1997, p. 18)

Students should avoid including too many artifacts in their portfolios; instead, they should carefully identify and selectively include portfolio

material that best represents their beliefs and their orientation to teaching.

Increasing Use of ePortfolios

As technology grows and changes, the traditional paper-based portfolio "has gradually evolved into an electronic portfolio or ePortfolio" (Sircar, Fetzer, Patterson, & McKee, 2009, p. 121). Abrami and Barrett (2005) defined an electronic portfolio (i.e., ePortfolio) as "a digital container capable of storing visual and auditory content including text, images, video, and sound" (p. 2).

In business. Beyond the field of education, there appears to be increased use of ePortfolios in hiring, especially in business-related fields. For example, Yu (2012) studied the potential use of the ePortfolio in a wide range of industries including tourism, product design, real estate, information and technology, insurance, recruitment service, and so forth. Moreover, some industries have begun to experiment with new visual resumes called "visumes" for job applicants (Sengupta, 2013; Young, 2013).

In teacher education. Similarly, Milman (2005) found that teacher educators have been exploring the use of digital teaching portfolios. According to Milman (2005),

> Digital teaching portfolios, sometimes referred to as multimedia portfolios, electronic portfolios, e-portfolios, webfolios, and electronically-augmented portfolios are similar to traditional teaching portfolios in content but present professional materials in digital format. Professional materials included in digital teaching portfolios are electronic media such as audio recordings, hypermedia programs, databases, spreadsheets, videos, and word processing. (p. 374)

Furthermore, Lambert, DePaepe, Lambert, and Anderson (2007) found that an electronic "portfolio provides opportunities for students to showcase their talents, creativity, and individuality, as well as technological capabilities" (p. 76). In addition, according to Goldsmith (2007), the electronic portfolio is more flexible, often allowing for convenient and less cumbersome access and viewing than do traditional paper or binder-based portfolios. Thus, while ePortfolios may be somewhat similar in content to traditional portfolios, they may augment or enhance the presentation of content through the use of electronic media, including audio, video, hypermedia, and so forth. In addition, they may also be more convenient to access and use than traditional paper portfolios.

Lieberman and Rueter (1997) suggested that ePortfolios "should be a solid reflection of teacher

development, quality of teaching, student learning, and quality teaching process and products, and a selective inclusion of electronic media can aid in meeting these teaching portfolio goals" (p. 46). When used well, electronic portfolios can provide information about an applicant well beyond what can be viewed on paper (Temple et al., 2003). ePortfolios can be designed to include evidence or artifacts that demonstrate the pre-service students' ability to teach. For instance, according to Yao, Aldrich, Foster, and Pecina (2009) "a portfolio needs to be designed to furnish real evidence of teaching competencies. Such evidence may include video-clips of teaching" (p. 36).

Video. Inclusion of videos in an electronic portfolio has the potential to bring the candidate to life and to provide examples of the pre-service teacher in action. Various researchers (e.g., Painter & Wetzel, 2005; Theel & Tallerico, 2004; Yao et al., 2009) have recommended including videos in pre-service teachers ePortfolios. In particular, when examining ePortfolios used in the hiring process, Strawhecker, Messersmith, and Balcom (2007/2008) found that 65% of the principals who responded ($n = 37$; response rate 37%) were interested in viewing a video clip of the teacher interacting with students in a classroom setting.

The Primary Purposes and Uses of Portfolios

According to Milman (2005), "who the audience is will greatly affect the contents and presentation of the portfolio" (p. 376). The problem for students is that there are many audiences, including teacher educators, licensure evaluators, and school administrators who wish to see evidence of student reflections and are charged with evaluating student growth. These audiences lead to three complementary and, at times, conflicting purposes for pre-service teacher portfolios. These are: reflection, evaluation, and hiring. While the pilot ePortfolio version, which is the focus of this study, encompasses all three purposes of portfolios, this article primarily focuses on the use of portfolios in the hiring process.

Reflection. A central purpose of portfolios is to cultivate, enhance, and document student reflection. This is perhaps the most frequently cited reason for having students create a portfolio (e.g., Antonek et al., 1997; Mansvelder-Longayroux, Beijaard, Verloop, & Vermut, 2007; McKinney, 1998; Zeichner & Wray, 2001). For example, according to Wolf and Dietz (1998), "More than anything else, the portfolio process should inspire reflection—alone and in the company of others, in writing and in conversation, in planning and in documenting one's teaching" (p. 14).

Fredrick (2009) suggested that reflection is key and that portfolios should include student insights about what has been learned and what needs to be learned. He

went on to identify three sub-skills. One, students can clearly articulate that they learned a skill and are able to name that skill. Two, students are able to point to evidence in their work that shows specific learning; and three, students are able to set goals for future learning (Frederick, 2009).

In terms of ePortfolios, Wetzel and Strudler (2008) found that teacher education faculty felt that ePortfolios enhanced student reflection and learning and fostered students understanding of the program's teacher standards. Painter and Wetzel (2005) found that the inclusion of video clips in ePortfolios was valued for its ability to give information about the applicant's relationships with students and ability to reflect on teaching. "Principals talked about how much they valued reflection in a candidate and liked hearing the person reflect on the video" (Painter & Wentzel, 2005, p. 26). Moreover, as a corollary to their reflective growth, Wilson, Wright, and Stallworth (2003) found that through the development of ePortfolios, student teachers also grew in their technological abilities.

Evaluation. Pre-service teacher portfolios are used for evaluation of pre-service teacher growth, as well as for evaluation and program revision in college/university teacher education programs. Some authors have identified portfolios as "barometers" of fulfilling teaching standards (Milman, 2005), "exfoliation devices" that peel back the layer of learning (Norton-Meier, 2003), an authentic assessment tool when used by colleges and universities (Guillaume & Yopp, 1995; McKinney, 1998; Wilson et al., 2003), and a repository of evidence that students are meeting the standards (Delandshere & Arens, 2003).

Portfolios are used as a way to evaluate pre-service teachers' readiness to become teachers. According to Vincent, Montecinos, and Boody (1997), "increasingly, teacher education programs across the country are requiring that their students develop portfolios to document their professional growth and teaching competencies" (p. 33). Many teacher education programs require their student to successfully pass a pre-service teacher portfolio prior to certification. Thus, pre-service portfolios have become high-stakes tests that many students must pass in order to be recommended for licensure.

Hiring. The final primary purpose for portfolios is as a resource or tool in the hiring process. In this respect, the research literature is a bit mixed, meaning that some studies appeared to indicate the benefits of portfolios in the hiring process, while other studies suggested limited use by administrators.

One way in which portfolios help in the hiring process is that all the work in compiling and reflecting upon their teaching may help teaching candidates prepare for job interviews. For example, Whitworth et al. (2011) concluded:

> Respondents in this study noted the value of portfolios in helping prospective teachers reflect on their abilities and skills and to anticipate and organize answers to possible interview questions. In this regard the portfolio can be an excellent tool for teacher applicants in preparing for job interviews. (p. 102)

In a national survey of school districts, Anthony and Roe (1997) found that although few school districts required portfolios in the application process, more than 50% of these districts later requested portfolio at the interview stage. Strawhecker et al. (2007/2008) found that past use of ePortfolios in the hiring process indicated future use. In other words, if the persons responsible for hiring have used ePortfolios in the past, chances are that they view ePortfolios as beneficial and would be willing to include them in future hiring decisions.

Still, much of the research evidence suggests that administrators and those charged with hiring teachers underutilize portfolios in the hiring process and undervalue what is presented in candidates' portfolios. To begin with, one significant barrier to principals using ePortfolios in the hiring process is that many principals may lack adequate technological skills to examine the ePortfolios effectively (Strawhecker et al., 2007/2008; Temple et al., 2003). Simply put, if principals do not feel comfortable accessing and navigating ePortfolios, it is unlikely that they will use them in the hiring process.

Whitworth et al. (2011) surveyed teacher educators (n = 127; response rate 12.8%) and administrators (n = 41; response rate 6.5%) in order to discern the value and use of portfolios in hiring, the quality and accuracy of portfolios, and the problems and barriers of using portfolios in hiring. Findings indicated administrators gave *some* weight (58%) to the portfolio in the hiring process. While teacher educators and administrators saw some value in using portfolios in the hiring process, "they did not perceive portfolios as having greater or even as great a value as other factors" (Whitworth et al., 2011, p. 99), such as direct observation of a candidate teaching. The limited use of portfolios in the hiring process was attributed largely to the administrators' lack of time to review them. The authors concluded, "The time factor could be controlled better with ePortfolios, particularly those that are web-based. The digital and hypermedia capabilities of such portfolios can make the selecting, organizing, and viewing of

portfolio items much more efficient" (Whitworth et al., 2011, p. 103).

Mason and Schroeder (2010) randomly selected principals from southeastern Wisconsin (n = 60; response rate 100%) and asked them various questions about hiring. They found a relatively neutral effect of portfolios and ePortfolios on the hiring process. On a scale of 1 to 5, the average response for the importance of a portfolio was 2.57 and of an ePortfolio was 2.54. Both of these responses fell between *somewhat unimportant* to *somewhat important*. Principals' comments helped to explain the neutral effect of portfolios and ePortfolios on the hiring process. For example, principals stated:

- "I just don't have time to look at a portfolio during an interview."
- "If I have an ePortfolio before the interview, I *may* have time to look at it."
- "A good portfolio certainly won't get you a job!"

Sivakumarran, Holland, and Heyning (2010) also studied portfolios using a survey instrument. Forty-one superintendents, 172 principals, and six human resource personnel responded to the survey instrument in Wisconsin, and two superintendents (n = 900; response rate 42%), 291 principals, and one human resources person responded to the survey in Louisiana (n = 700; response rate 42%). Results indicated that approximately 91% of the people surveyed *do not* require teacher applicants to present a portfolio of their work during the hiring process. Further, 58% preferred a paper portfolio, while 38% preferred a web-based or CD-ROM portfolio. Furthermore, only 12% of the respondents indicated that a digital or ePortfolio increases an applicant's chance of getting hired. The authors concluded that "portfolios are not considered an integral part of the hiring process" (Sivakumarran et al., 2010, p. 4).

One hundred forty-two K-12 principals in Illinois responded to Kersten's (2008) survey (35.7% response rate), where he found that only 3.3% of the school districts required traditional portfolios and just 0.8% of districts required digital portfolios. Kersten (2008) concluded, "[Portfolios] are not yet seen as valuable tools in the teacher selection process, even though university teacher preparation programs often require students to develop them" (p. 361).

In another study by Theel and Tallerico (2004), 32 principals were surveyed and asked about the importance of portfolios in the hiring process. Principals voiced concerns about the relationship between a portfolio and the ability to teach. Principals indicated that the materials found in portfolios reflect not what potential teacher candidates can do but what they say they can do.

Further, the interview itself was too short for principals to look fully at a portfolio. Portfolios were too large and cumbersome to view, collect, share, and store in advance. The authors concluded, "Portfolios do not provide credible evidence of candidates' teaching abilities or people skills" (Theel & Tallerico, 2004, p. 29). Finally, several researchers (Boody, 2009; Jacobson, 1997; Mosely, 2005; Vincent et al., 1997) reaffirm that teacher portfolios are not a primary factor in the hiring process.

Clearly, these research studies represent an apparent disconnect between what is required at the teacher education level and what is actually useful in the hiring process. Many, probably most, principals currently do not consider or extensively consider portfolios as part of the hiring process. Research suggests that currently ePortfolios may not be any more useful to principals than paper portfolios. If portfolios are being underutilized by principals in hiring decisions, the questions is: How can portfolios designed so that principals will want to make use of them in the hiring process? With this question in mind, the researchers developed a pilot ePortfolio with an introductory video and directly interviewed principals, the chief hiring agents in a school, to find out if such an ePortfolio might be more useful to them in hiring decisions and to discern how ePortoflios might be improved for use as tool in the hiring process.

Method

Procedure

Development of the ePortfolio. During the student teaching semester, seven social studies undergraduate students and one graduate student enrolled in a special course designed to foster reflection on student teaching. Students in this course were required to construct an ePortfolio using Desire2Learn ePortfolio (v.1.1.0) that included a three to four-minute introductory video, a philosophy statement, and evidence of meeting and reflecting upon the 10 Wisconsin State teacher standards. The example ePortfolio that was created by Kate Arnold and shared with principals for this study can be found at http://geturl.uww.edu/1o3.

The student's ePortfolio, which included an introductory video, was shared with 15 public school principals, representing a variety of backgrounds and school size. Principals came from rural as well as urban public schools and from both large and small schools. Because of the representative size and location of a school district was of primary concern to the researchers, principals were intentionally, rather than randomly, selected. The demographics of principals interviewed   can   be   seen   in   Table   1.

Table 1
Principal Demographics by School Type

School Type	N	Females/ Males	Student Population (M)	Principal Experience (M)	Educational Experience (M)
Elementary	4	3/1	412	13	24
Middle	5	3/2	524	8	17
High	6	1/5	1133	13	29
Overall	15	7/8	738 (555.88)	11 (6.5)	23 (9.49)

Note. Means are rounded to the nearest whole number. Parentheses indicate standard deviation.

The ePortfolio that was shown to principals contained a 3 min 34 sec video that addressed: (1) the student's description of the ePortfolio and its contents; (2) an overview of the pre-service teacher's philosophy of education, significant educational and professional learnings, examples of educational strategies, ways to connect with students, as well as beliefs about classroom management; and (3) a discussion of strengths and weaknesses, as well as professional goals and plans. The actual Introductory Video Reflection Assignment is provided in Appendix A.

Semi-structured interviews. After giving the principals time to view the introductory video and to review the ePortfolio, the researchers conducted semi-structured interviews with each of the 15 principals involved in the study. The semi-structured interview protocol is provided in Appendix B. Follow-up questions were asked to explain, clarify, or elaborate on answers.

The interviews were conducted at each principal's school and ranged from 15 minutes to 1 hour and 15 minutes. Two of the semi-structured interviews were conducted by both researchers, six were conducted by the course instructor, and seven were conducted by the other researcher. Thirteen of the interviews were audiotaped and transcribed. Two additional interviews were conducted, but due to audiotape malfunctions, only notes were taken during these interviews.

Data Analysis

Based on the interview transcriptions and interview notes, an initial list of descriptive codes (Miles & Huberman, 1994) was created. These codes were reflective of the categories inherent to the semi-structured interview protocol questions. The constant comparative method (Glaser, 1965) was used "to generate theory more systematically" (Glaser & Strauss, 1967, p. 437) and to structure and systematize the data analysis. The constant comparative method combines coding and analytic procedures and involves the continual assessment and comparison of emergent codes and categories to one another. It was used to refine and develop new codes, and to link codes into

larger categories or themes. In order to validate the findings, the two researchers discussed and negotiated coding and collaboratively combined broad categories into emergent themes (Patton, 2002). Where differences existed, the researchers discussed the issues in question until an agreement was reached. Throughout the article, illustrative quotes are provided for the reader as low-inference descriptors (Ary, Jacobs, & Sorenson, 2010).

Findings and Discussion

All of the administrators interviewed indicated that they currently either do not use or minimally use portfolios or ePortfolios in the hiring process. Consistent with the literature, the most commonly cited reason for underutilization of portfolios in hiring decisions was insufficient time to review portfolios. Many principals expressed regret, in that they realize how much effort candidates put into their teaching portfolios. As one principal, who has a daughter who was recently certified to teach, said,

> Prospective teachers who are out interviewing put a lot of time into those portfolios and are disappointed in how little they get looked at. I know that it is a requirement, so they have to go through the hoops regardless. I think it is frustrating. (Principal 3)

With this as a baseline, we now turn to the primary research question.

How Do Principals View and Indicate that They Might Use the Current Pilot Version of an ePortfolio, with an Introductory Video, in the Hiring Process?

In marked contrast to the administrators' history of extremely limited use of portfolios, when shown the pilot ePortfolio with the introductory video, most of the principals who participated in the study saw value in the pilot ePortfolio and indicated that they would incorporate such a portfolio into their hiring process. In fact, all but one (93%) of the principals indicated that

they would use a similarly structured ePortfolio with an introductory video for hiring purposes. One principal was quite candid about how prior to the interview, he did not anticipate that he would use the ePortfolio, but upon viewing it, he significantly changed his tone. He stated,

> I was doing this (interview) as a service to the university, quite honestly, because I really didn't think what this was going to be—this is good stuff. I mean, I didn't think that it was going to be as good as it is. (Principal 6)

Introductory video. The key to the pilot ePortfolio seems to be the introductory video, as all but one (93%) of principals indicated that they would use the introductory video for hiring purposes. The value of the introductory video is that it allows principals to connect virtually with the candidate and to get a visual as well as a quick overall sense of the person. For example, after viewing the introductory video, Principal 2 stated,

> I would look at the ePortfolio anyway, but I think that the video really enhances the ePortfolio . . . I think that it is wonderful . . . It is a whole different way to connect with a person without that person being here.

Similarly, another stated,

> Instead of me reading through a whole bunch of documents and screening up and that—the video is a real visual piece, kind of . . . an introduction and a wrap up all together of who this person is. I would be more likely to view that. (Principal 7)

Given the importance of the introductory video, the researchers probed further to discern what made the video so valuable and how administrators might use it. Several principals suggested that the introductory video could be used as a kind of a pre-interview. For example, Principal 7 stated: "I feel like I conducted an interview just by what she said . . . By doing her 3 minute and 34 second, or whatever it was, I completed an interview" (Principal 7). Another principal elaborated on all the things that he might learn from the short introductory video:

> It is more than a picture, it's a presentation. They are talking about their pedagogy. They're talking about reflection. What does reflection mean to them? Their philosophies are embedded in there. I think that you get a lot from that 3-minute clip with the structure you have got. (Principal 13)

Another category that emerged from the data was that the introductory video enabled principals to gain some insight into the candidate's professional skills and dispositions. For example, Principal 2 stated, "You are able to tell through their communication if they have a passion for teaching. You can see it in the face. You can hear it though their words." While this administrator focused on passion, different administrators emphasized different professional skills and dispositions. Some of the many that were mentioned included: passion, enthusiasm, intelligence, articulateness, composure, genuineness, organization and presentation skills, professionalism, and confidence.

For many principals, the introductory video might entice them to examine further the ePortfolio. As Principal 8 stated,

> That [introductory video] was a good teaser. Like an advertisement that drew me in . . . I would hope that the ePortfolio would expand on some of those things that intrigued me, [that would] tie into to the standards.

It appears the introductory video may serve as a "hook" to grab the principal's interest and encourage him or her to examine other parts of the portfolio.

While administrators generally had a favorable view of the ease of use of the ePortfolio, technical glitches at the schools posed a significant problem to playing the ePortfolio's introductory video. The majority of principals (66%) had technical difficulties opening the introductory video using QuickTime. Many principals indicated that under normal circumstances, they would try once or twice to access the video, but would then move on to other tasks. Several researchers have reported that principals' lack of technological skills appears to undermine the use of ePortfolios in the hiring process (Strawhecker et al., 2007/2008; Temple et al., 2003). However, in this case, while some of the administrators seemed to lack the ability to correct the problem easily, it appeared that the schools' Informational Technology (IT) departments were to blame for not having the fairly basic QuickTime program loaded on the school computer. Surprisingly, in some schools the principals' computers were prevented from downloading programs by IT screens and firewalls.

A second version of the ePortfolio, which is provided in the "Improvements: ePortfolio Version 2 section," used Adobe Flash Player and YouTube. While this eliminated the problems associated with QuickTime, many schools have filters (i.e., firewalls) that limit the use of YouTube videos. This is a significant impediment to the use of introductory videos in ePortfolios, which is dependent on school districts IT departments to resolve.

Ease of use/efficiency. The course instructor made every effort to make the ePortfolio easy to use for administrators or other viewers of the ePortfiolio. The pilot ePortfolio used for this research was Internet based, with no password, which allowed for convenient Uniform Resource Locator (URL) access. This is consistent with the finding of Strawhecker et al. (2007/2008) that a URL (e.g., as opposed to leaving a CD) was the preferred delivery/receipt method of principals. Moreover, for more convenient entry, the URL was reduced significantly in length by using a university owned URL generator (geturl.uww.edu). Other potentially usable URL shorteners include: tinyurl.com or bitly.com.

One category that emerged from the data was that many of the principals viewed the pilot ePortfolio as easy to use, especially in comparison to the cumbersome traditional paper-based three-ring binder portfolios. For example, Principal 11 stated:

> The advantage of this is you don't have to have somebody leave a six-inch binder [paper portfolio] for 20 people that you talk to, and leave all these things on your desk, and get it back to them, and get them to pick it up. That's a pain. Having that right here at your disposal, click on it, when I'm done with it, I log off.

Two important advantages of ePortoflios over paper-based portfolios are apparent in this quote. First, electronic portfolios save office space, eliminating unnecessary clutter. And second, they limit wasted transactional time, eliminating the need for collecting and returning portfolios.

The ability to navigate quickly and easily to what the principal wanted to view was another advantage mentioned by many principals. For example, Principal 1 stated:

> I really appreciated how I had options that I did not have to look at the whole thing (ePortfolio) to find what I wanted. I wanted to know about a lesson. I went there. I wanted to know about her philosophy or resume I went somewhere else. I liked having options to see what I wanted to see—to navigate quickly.

Still, time is always precious to busy administrators, and Principal 11's comments highlight the tension between limited time and efficiency:

> I think it is a great tool, you can see a snapshot of each of the candidates, but time is always a factor in leadership. But at the same token, sitting down with a lot of different candidates and trying to screen out who is good and who is not, or who do you want to advance to the second and final stage. That also takes

time as well. But it is a time factor. It depends on how many people that I would be asked to view.

In this quote, the principal appears conflicted. On the one hand, the ePortfolio can be used to screen efficiently potential interview candidates, which is a net time saver. On the other hand, the principal appears concerned about how much time he might have to invest in reviewing several portfolios.

Uses. One primary aim of this research was to focus on how and when the introductory video and the ePortfolio might be used. In general, the principals reported using the introductory video and the other parts of the pilot ePortfolio in various ways, as listed in Table 2. In actuality, the introductory video and the other parts of the ePortfolio are inherently connected, and it is somewhat artificial to separate these aspects of the ePortfolio into two parts. In fact, administrators frequently conflated the two.

The researchers anticipated that the introductory video and other parts of the ePortfolio would be used primarily as an introductory screen for selecting candidates to be interviewed. However, this proved not to be the case. While principals reported that they would use introductory videos quite often (73%) to screen and would use other parts of the ePortfolio a majority of the time (57%) to screen, these aspects of the ePortfolio were more likely to be used after the initial screening, either immediately prior to interviews or following interviews. Still, as is evident in Table 2, principals quite often reported that they would use the introductory video and other parts of the ePortfolio to initially screen candidates, to prepare for interviews, and to more thoroughly evaluate candidates following interviews.

Initial screen. Nearly three-quarters (73%) of principals indicated that they would use the introductory video, and a majority (57%) indicated that they would use other parts of the ePortfolio to screen or help to decide which candidates to interview. For example, an elementary principal (Principal 8) mentioned that if he had 180 candidates' application materials to review, he would quickly peruse all the introductory videos and parts of the ePortfolio in his quest to interview the best candidates. He stated the following:

> I mean 3 minutes to do a scan. It took me about 5 minutes to screen each candidate initially [prior to this system]. I could look at a quick resume. Look at this [the introductory video], probably at the same time, honestly. I'd pull up this thing while looking at the resume—if it is a quick [link]—and do them both simultaneously. (Principal 8)

As is evident in this quote, principals were quite concerned about using their time efficiently. Implied in

Table 2
General Uses of Introductory Video and Other Parts of the ePortfolio

	Introductory Video (93%)	Other Parts of the ePortfolio (83%)
Initial Screen	73%	57%*
Prior to an Interview	80%	79%*
Following an Interview	80%	86%*

Note. n = 15. For percentages with a asterisk (*), due to missing values *n* = 14.

the above quote is that using the ePortfolio need not add to the amount of time the principal invests in selecting candidates as he could multitask, watching the video and reviewing the resume simultaneously. This quote harkens back to limitations on time being a critical limiting factor for principals and the notions of ease and efficiency of use of the pilot ePortfolio.

While many principals would screen using other parts of the ePortfolio (57%), more would use only the introductory video (73%) as a screening device. This discrepancy seems to be related, once again, to concerns about time limitations. Principals could use the new media of video and audio to multitask, perusing other documents while playing the introductory video. It appears that they hoped to make a decision by "thin slicing" (Ambady & Rosenthal, 1992; Gladwell, 2007); that is, to use experience, intuition, and this quick survey of information about applicants to make good, perhaps superior, interview selections.

In contrast to the principal noted above, who indicated that he would quickly review parts of the 180 different ePortfolios, many principals indicated that they would focus on just the introductory video, and depending upon the number of applicants, they would decide when to use the video as a screening device. For instance, Principal 6 noted that based on the number of applicants, he might use the introductory video as a primary or a secondary screening tool:

> If we have 10 applicants, I'd probably look at all ten of them. If we had 50 applicants, I'd probably narrow it down to our top candidates with the paper screen. Quite honestly, I probably wouldn't look at all 50 of them.

Prior to an interview. Principals noted the value of using the introductory video (80%) and the other parts of the ePortfolio (79%) to prepare to interview a job applicant. For example, in the following quote, Principal 2 indicated how she would use the ePortfolio to prepare herself and the interview team to consider what she calls "look fors" (i.e., critical position-related dispositions and skills):

> I would look through it [the ePortfolio] first and then of course have the team see it. If I look through it first, I could list some bullet points to have some "look fors" for the team to consider, so that they can look for some of the things that we need for that specific position—Make sure you look at the communication skills. Make sure you look and see if there is the eye contact. Make sure that you look at the lesson. Are the lessons centered around the Wisconsin Standards?

In addition to this quote revealing how the principal might use the ePortfolio to prepare for an interview, an assumed benefit is that the ePortfolio could be easily shared with the interview team. In contrast to a paper portfolio, which would have to be passed awkwardly from person to person, several members of the interview team could conveniently access the ePortfolio prior to an interview.

Following an interview. When it came time to make a hiring decision, principals noted the value of using the ePortfolio (86%) and the introductory video (80%) to double check on things mentioned in the interview or simply to recall the various candidates. For example, Principal 7 said,

> I definitely would have used it as a follow up. If there is anything there that I just—you know maybe I had a question in my mind after I did the six interviews and then I come back to her, and I go, you know, I just need to go back and refresh myself and—I would have gone back and used her artifacts, her reference, or even just what her spoken video said.

Having the ePortfolio readily accessible enables principals to look for confirming or disconfirming evidence of claims made in the interview and to more carefully consider things perhaps not fully addressed in an interview. Moreover, in the hustle and bustle of busy administrators' work weeks, they may interview many candidates for several jobs. Trying to remember who said what may be challenging. Easily pulling up an introductory video and reviewing various portfolio artifacts may help principals to recall and differentiate better between the many job applicants.

In terms of differentiating between teaching candidates, principals noted that the ePortfolio can be

used to both select a candidate and rule out others. For example, Principal 6 stated, "You are down to the two candidates. So now you're thinking, I am going to read this because I am looking for reasons not to hire this person."

Unexpected creative possibilities. Beyond the previously mentioned uses of the introductory video and the ePortfolio, individual principals mentioned a number of creative and, to the researchers, unexpected additional ways that they might use the pilot ePortfolio. A few principals noted that the introductory video in the ePortfolio could be used to introduce the new hire virtually to the department, the staff, or even to parents and guardians. Furthermore, the contents of the ePortfolio could be used to justify a hiring decision to the superintendent or the school board. Other principals noted the value of the ePortfolio in facilitating mentoring relationships. Not only could the mentor teacher be introduced virtually to the new hire, but the mentor could become familiar with the current capabilities, tendencies, and goals of the new hire. The mentor could use this information as a way to constructively begin helping the new hire to learn and grow as a professional. In addition, the new hire's good ideas could be shared with the department or staff as an example that others might emulate.

Sharing recommendations. A few principals noted that, with the permission of the applicant, the ePortfolio of a strong candidate who was not hired might be sent to another principal for consideration. One principal put it this way:

> When I hired a teacher just recently—I got another three—I would have hired all three of them. I could very easily send it to let's say another principal in a district [who] has a new opening that pops up. Hey, here is somebody, take a peek, and here's the link. In a bigger district, I could see that happening quite a bit . . . If another principal gives me something to look at about a candidate, I am going to take a close look at it. (Principal 8)

Principals regularly network and share good candidates with each other. In fact, according to Mason and Schroeder (2010), principals seriously consider the recommendations of other administrators.

With a paper-based three-ring binder portfolio, the transactional effort of sending the portfolio to another principal would likely prevent the original principal from forwarding it. In contrast, with an ePortfolio the URL can be easily emailed to one or more principals. This recommendation helps the principals who receive it by potentially reducing their candidate screening time and by receiving not just a recommendation, but one with evidence of the candidate's quality attached. In addition, the contact information of the candidate is readily accessible in the ePortfolio. This sharing of recommendations between principals is not only important to hiring quality new teachers, but it also enhances the collaborative network of trust between administrators, schools, and school districts.

Circumvent the district screen. In many larger school districts, the initial screening of job applicants is done by the Human Resources department at the central office. While larger school districts have reasons for this bureaucratic procedure, principals in these districts may miss potentially good candidates, as they may be screened out before the principal even becomes aware of them. Two principals in our study were from different large urban school districts that used this type of central office screening procedure. Each principal noted that if the job applicant had sent the principal a cover letter or an email containing the ePortfolio URL, the principal would quickly review the ePortfolio. And in the case of an especially promising candidate (such as the one they had reviewed for this study), each principal would have contacted the district office and asked that this candidate be added to the approved interview list. For example, Principal 7 stated:

> If I received it [the URL for the ePortfolio] before the interview, she [the candidate] would be one that I would ask the district to send me her name [i.e., put on the district office list of candidates who would be approved for interviews].

When asked about how a job applicant might transmit the URL to them, both administrators were surprisingly open to receiving a letter or an email, and in one case, the principal even welcomed a quick drop-in visit. When pressed about the time involved in these unsolicited contacts, both administrators emphasized that perhaps the most important thing they do is to hire exceptional teachers and that time devoted to this task is not wasted.

Benefits to Candidates

While the primary focus of this article is on the value of the pilot ePortfolio to principals involved with hiring, three benefits of the ePortfolios to teacher candidates are also worth mentioning. First, it is obviously beneficial to strong teacher candidates to have administrators recommend and share their portfolios with others who are in a position to hire them. Second, it is potentially beneficial to job candidates to circumvent the screening procedures of a district's central office by sending the URL of their ePortfolio directly to the principals who will make the final hiring decision. And third, many administrators assumed a level of

technological expertise by teaching candidates with an ePortfolio. For example, Principal 2 stated,

> I'd be willing to bet that if we need something done electronically this person could help to do in-services for other staff members, could lead staff development in that area, and could work with their "family" [instructional team] to develop lifetime ePortfolios. I certainly see that person as a trendsetter.

Given the support provided by the university, even students with relatively weak technological skills were able to put together a presentable ePortfolio. Still, the assumption of technological competence may give students with an ePortfolio a competitive advantage over their counterparts who use paper-based portfolios.

Recommendations and Improvements for the ePortfolio

While the researchers were pleased that the pilot version of the ePortfolio was so well received, they were careful to ask principals about their concerns and for suggestions as to how to improve the ePortfolio to make it even more valuable to administrators in the hiring process.

Brief introductory video. When asked about the appropriate time length of the introductory video, nearly all the principals indicated that three minutes was a good length and anything over five minutes was too long. Principals are busy, and they expect candidates to be focused and to the point. In fact, one principal stated that even with a three to four-minute video, "those first 20 seconds will determine whether they [the principal and the hiring team] will watch the whole video" (Principal 4).

Cautions against a canned assignment. Principals cautioned that if the introductory video assignment involved too much structured preparation and was too prescribed, it would diminish in value. As one principal put it, "If we start getting candidates from the university and they all look boilerplate—I know that they are going to address this and they are going to address this—then it will lose its value" (Principal 4). Another principal, indicated that it would be fine for the university to provide some guidance or give the assignment some structure, but instructors should be careful not to lead the students too much on exactly what they should say. For example, Principal 7 stated:

> If [teacher educators] go out and give them a template and say here are some things to talk about, you know here are some things that you might look at—that is one thing, and I think that that is okay. But they need to put who they are into

that template because I think that otherwise it is too much of a canned advertisement out of [the university].

The key suggestion implied in these comments was that rather than simply parroting the ideas of their professors, students should be encouraged to genuinely express their own views and ideas. This will enable principals to better distinguish between the stronger and weaker teacher candidates. Ultimately, principals hoped that leaving the assignment somewhat open-ended would give them a better sense of prospective teaching candidates and of what they genuinely believed about education.

Including a teaching video. While most principals spoke favorably of the value of the introductory video, many principals wanted to observe the candidate in action, to see them teaching and working with students. For example, a middle school principal stated,

> Better than this to me would be videotaping them actually in instruction . . . I'd like to see student teachers live instruction in their science and math classes . . . I'd like to see them interacting in the hallway, running a lunch period, conducting a study hall, as well as class. (Principal 3)

This finding is consistent with other research addressing the value of including videos of candidates teaching in ePortfolios (Strawhecker et al., 2007/2008; Temple et al., 2003; Whitworth et al., 2011; Yao et al., 2009). In the current study, many principals expressed a desire to see both an introductory video to get a sense of the person and his or her beliefs about education and another video showing the candidate's actual abilities as an educator. The combination of these two videos would allow the administrator to evaluate the candidate's ability to articulate their knowledge and beliefs about education and to judge how well the candidate enacts these beliefs when working with students.

In addition to these comments about the inclusion of teaching videos, one principal suggested that teaching candidates might include a video as evidence for several of the teacher standards. Another principal suggested that the teaching candidates might provide a teaching video and periodically infuse this video with a voice-over, in which the candidates reflects upon their practice.

Additional general suggestions. Individual principals provided a number of additional suggestions for improving the introductory videos and enhancing the ePortfolio. In terms of the introductory videos, various principals suggested that the candidate consider carefully the setting of the introductory video so that it is consistent with the general message of the video.

Another principal suggested that perhaps the introductory video could be less of a "talking head" and include images of the school, classes, etc. while the teaching candidate explains his or her beliefs about education. Another principal suggested that the candidate might create some type of anticipation guide, or an outline, that corresponds to and supports the introductory video. Finally, a few principals discussed the benefits and drawbacks of refining the videos to include headers, transitions, and other graphics. Some felt that greater polish might enhance the video, while others thought these things could become distracting. Ultimately, it seems appropriate to create a quality video, in which technological enhancements are used judiciously and purposefully to convey the overall message more clearly.

Individual principals also made several suggestions for improving the overall ePortfolio. For example, two principals suggested the inclusion of a photo of the teaching candidate, along with the candidate's name and contact information. A few principals suggested that the entire ePortfolio could include appropriate supporting visuals and graphics. For example, one principal suggested that the philosophy statement might include a graphic representation of the key words used in the philosophy statement. This graphic is easily developed using the Web 2.0 tool Wordle (wordle.net).

Improvements: ePortfolio, version 2. The course instructor took many of the suggestions noted above and revised the ePortfolio to make it even more valuable to administrators in the hiring process. First, while the introductory video in the portfolio example was only 3:34 minutes, the course instructor allowed the pilot introductory video to be longer than four minutes. For version two of the ePortfolio, the course instructor was more adamant that students keep their videos to less than four minutes. Second, in an effort to avoid turning the introductory video into an inauthentic, "canned" performance, students were provided with structured support through the Introductory Video Assignment (see Appendix A), but were allowed to modify the assignment and to include the content they felt was most appropriate. Third, while the initial pilot ePortfolio (e.g., Kate Arnold's ePortfolio, http://geturl.uww.edu/1o3) had only an introductory video, version two (e.g., David Huss's ePortoflio, http://geturl.uww.edu/1o2) included an introductory video and a teaching video. Fourth, given the many technical glitches encountered by principals when trying to use QuickTime to open the pilot introductory videos, version two uses Adobe Flash Player and embedded YouTube videos. Fifth, in the pilot version students were not required to create a Wordle visual for their philosophy statement (although the student provided in the example had done so). In version two, students were taught how to use Wordle and required to

include a Wordle visual for their philosophy statement. Finally, in version two, students were required to include a photo, with their name and contact information on the side border of their ePortfolio. In this way information was always visible to whomever might be reviewing the portfolio. Ultimately, the researchers are hopeful that these research-based changes will make version two of the ePortfolio even more useful in the hiring process.

Limitations

The limited number of principals interviewed may not make this study generalizable to the entire population, but may be a sufficient number to determine general direction and thought. The sample was convenient and not representative of the principal universe. All principals were from one Midwestern state, so they may represent the thoughts, feelings, and values of this area of the country.

Since one of the researchers was also the course instructor, it is possible that principals may have felt pressure to be positive about the potential uses of the ePortfolio. Every effort was made to make the administrators feel comfortable and to encourage them to give open and honest responses. Given the candid nature of many of the principals' remarks, it seems unlikely they were trying to please the interviewer. Moreover, there appeared to be no significant differences in responses by principals when the interview was conducted by one or other researcher. In short, the researchers have no reason to believe that administrators were responding in inauthentic ways in order to please the interviewers.

Recommendations for Future Research

The current article is based on research that was conducted with school principals from a single Midwestern state. The authors recommend that similar research be conducted with principals from other regions of the country. This broader geographic sampling of principals may reveal regional differences and enable researchers to identify national patterns regarding the use of introductory ePortfolios in the hiring process.

Additional research might be conducted on how the use of ePortfolios with introductory videos impact reflection by teacher candidates. On the one hand, the use of the ePortfolio as a tool in the hiring process could undermine open and honest reflection, as pre-service teacher candidates may seek to "perform" for potential employers and therefore may be less apt to examine critically areas of their practice in which they have struggled. On the other hand, if candidates believe that their ePortfolios may be reviewed by prospective

employers, they may attend more carefully to the quality of the materials and reflections included. Hence, it is unclear exactly how reflection would be impacted. Further research could address the question of whether the creation of an introductory video and/or the inclusion of teaching videos impacts reflection by teacher candidates. How do the candidates approach these tasks, and how do they select the content for the introductory video, as well as the examples of teaching and other aspects of their practice, for inclusion in the videos?

A third fruitful area of future research might address how the creation of an ePortfolio with an introductory video may impact the teacher candidate's interview performance. Are candidates who create an ePortfolio with an introductory video better prepared for interviews? Are they more cognizant of their dress and their body language? Are they better prepared to marshal evidence and provide stronger more specific examples to support claims they make in the interview?

Finally, a fourth important area of research might address how the visual nature of ePortfolios impacts the selection of candidates for interviews. The candidate's race, ethnicity, gender, and to some extent, language fluency and disability status, are visually on display. For good or for ill, administrators may be influenced by these identity factors. Some schools may see this as an opportunity to interview candidates who are perhaps under-represented on their staff (e.g., minority candidates, male elementary school teachers). On the other hand, it is possible that some administrators would discriminate based on these readily apparent identity features. The examination of how ePortfolios enables selection based partially on identity features merits further study.

Conclusion

Many colleges and universities require the portfolio as a student exit device to demonstrate the student's teaching knowledge (Vincent et al., 1997). Some states also require portfolios for completion of a teacher education program. Students often believe that a portfolio is necessary to secure a job. Yet the research literature suggests that too often, principals simply do not have the time to review portfolios during the interview process.

The current study looked at how principals might use an ePortfolio with an introductory video in hiring decisions. Overall, principals were quite taken with the pilot ePortfolio, seeing the introductory video as an enticement to look further at a teacher candidate's ePortfolio. Based on the 15 principals interviewed for this study, 93% reported they would use the introductory video, and 83% reported they would use other parts of the ePortfolio in the hiring process.

Principals appreciated the ease of use, as well as the convenience of being able to view an ePortfolio on their own schedule and not having to worry about returning it when they were done. And while reviewing the ePortfolios and/or watching the introductory videos might take time, principals indicated that the introductory video was like a mini-interview that could help them initially to screen teaching candidates. Moreover, the principal could multitask, scanning key parts of the ePortfolio while watching the introductory video. Many principals reported that they might use the ePortfolio to prepare for an interview or to review after interviews to help them evaluate and recall individual candidates. In addition, principals identified a variety of creative uses of the ePortfolio, such as using it to introduce the candidate virtually to staff, superintendents, or parents; to justify hiring decisions; to facilitate mentoring relationships; and simply to share good ideas. Moreover, there is the potential to share easily the ePortfolios of strong candidates who were not hired with principals at other schools who are looking to fill a similar position. Furthermore, in districts with central office screening procedures, principals indicated that based on a strong introductory video and ePortfolio, they might override the district screening procedures and add the candidate to the interview list.

While principals generally saw value in the pilot ePortfolio, they made a number of recommendations, such as keeping the introductory video short, avoiding too much guidance in order to make the introductory videos authentic representations of the students' voices, and adding a teaching video so that the principal could assess the candidate in action. These ideas and others were incorporated into an updated version of the ePortfolio. The URLs for an example of the original pilot ePortfolio (Kate Arnold's ePortfolio, http://geturl.uww.edu/1o3) and the new version two ePortfolio (David Huss' ePortoflio, http://geturl.uww.edu/1o2) are provided so readers can judge the merits of the ePortfolio for themselves.

The use of web-streamed video, whether it be for the introductory video or for a teaching video, seems critical to the value of this version of an ePortfolio. Unfortunately, due to technological glitches, including school computers not having basic video-streaming software and district firewalls preventing the downloading of the necessary software, many principals had trouble playing the videos. Even a YouTube video could not be played in some venues because of district firewalls. This major problem needs to be overcome if web-streamed videos are to be used universally in ePortfolios.

Finally, pre-service portfolios are used to foster reflection, enable evaluation, and facilitate hiring. These purposes may be contradictory, or are at least in

tension with each other. Can pre-service teachers really reflect honestly when passage of the portfolio is required for licensure or is going to be viewed by those in charge of hiring? The proposed ePortfolio does not solve this issue, but it may inspire students to do their best work. The course instructor and co-author believes that students who created the ePortfolios with an introductory video appeared to take the assignment more seriously, to work harder, and to reflect more deeply than previous students had on their paper portfolios. Perhaps these educational benefits were due to the inherent value that students saw in creating an authentic, professionally useful ePortfolio.

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Authors' Note

Appendix A
Introductory Reflective Video Assignment

You should create a 3-4 min. (maximum) introductory video reflection for your e-portfolio. Please address the questions below. The level of detail on any particular question may vary. In order to stay within the time limit, you might want to address several of these questions at the same time. Like any formal document, I encourage you to edit your video. The WITRC computer lab can provide technical assistance with the editing process.

Begin your video with some basic introduction. For example:

My name is_____, and I will be certified to teach Secondary Social Studies, specifically _____, _____, and _____. I would like to introduce my e-portfolio by sharing some of my thoughts and reflections on education.

1. What is your overall philosophy of education?
2. What have you learned in your teacher education program that will help you as a teacher?
3. What do you believe are the best ways to educate students?
   a. Provide concrete examples
   b. Describe a successful lesson. What made it successful?
4. How do you develop positive relationships with students?
5. Describe your approach to classroom management? What beliefs guide this approach?
6. *Optional:* Discuss any (Pick one or two) or all of the WTSs.
   a. Discuss its importance,
   b. How do you demonstrate it, and
   c. Identify your goals in regards to this standard.
7. What are your strengths and weaknesses?
8. What are your goals as an educator? How do you plan to grow and improve as an educator?

_____

Other ideas[1] that you might want to include:
1. What do you want to accomplish as a teacher?
2. How will (do) you go about finding out about students' attitudes and feelings about your class?
3. An experienced teacher offers you the following advice, "When you are teaching be sure to command the respect of your students immediately and all will go well." How do you feel about this?
4. How do you go about deciding what it is that should be taught in your class?
5. A parent comes to you and complains that what you are teaching his child is irrelevant to the child's needs. How would you respond?
6. What do you think will (does) provide you the greatest pleasure in teaching?
7. When you have some free time, what do you enjoy doing the most?
8. How would you go about finding what students are good at?
9. Do you like to teach with an overall plan in mind for the year, or would you rather just teach some interesting things and let the process determine the results? Explain your position.
10. A student is doing poorly in your class. You talk to her, and she tells you that she considers you to be the poorest teacher she has ever met. What would you do?
11. If there were absolutely no restrictions placed upon you, what would you most want to do in life?

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[1] From the Berea Independent School District Application

Appendix B
Semi-Structured Interview Questions

Reflective Video
1. Would you use this short introductory video in the hiring process?   Yes No
    If so, how?
    a.   Would you use the short introductory reflective video in any of the following ways:
        i.   As an initial screening device
        ii.   Just prior to an interview
        iii.   Following an interview
        iv.   And/or in another way
2. If you would not use an introductory video, why not?
3. If you would not use an introductory video, can you see a way of using one in the future?
4. After viewing this introductory video, would you have any interest in looking more closely at a candidate's E-portfolio?
5. Do you have any suggestions for improving and/or streamlining the introductory reflective video?

E-Portfolio
6. Would you use this E-portfolio, or parts of it, in the hiring process?   Yes No
    If so, how?
        a.   Would you use the E-portfolio, or parts of it, in any of the following ways?
        i.   An initial screening device
        ii.   Just prior to an interview
        iii. Following an interview
        iv.   And/or in another way
7. If you would not use the E-portfolio, why not?
8. If you would not use and E-portfolio, can you see a way in which you might use an E-portfolio in the future? Consider both modifications to the E-portfolio and changes in the way you might approach hiring in the future.
9. Do you have any suggestions for improving and/or streamlining the E-portfolio?

Notification and Delivery
10. How should a job applicant notify you of the existence of an introductory video?
11. How should a candidate notify you of the existence of an E-portfolio?
12. What would be the most convenient way for you to receive an introductory video from a candidate? (e.g. DVD, URL or another method)

Further Involvement
13.   At another time, perhaps in conjunction with a follow-up interview, would you be willing to offer further suggestions for the introductory video/E-portfolio?
14. Would you be interested in serving on a team of administrators and perhaps teachers who would evaluate an E-portfolio defense? The portfolio defense might serve as a culminating activity for students as they complete their teacher education program.

Demographic and Background Questions
1. How many years have you been a principal?
2. How many years have you been in education?
3. Note gender: M   F
4. Is the school: Elem Middle HS
5. How many students in your building?
6. How many classroom teachers do you have?
Approximately how many teachers do you hire in a given year?