Shaping Teacher Candidates' Digital Portfolios: What Administrators Want for Hiring

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Abstract

This qualitative study investigated P–12 school administrators' perceptions of teacher education candidates' online digital portfolios for hiring purposes. Over the course of three semesters, focus group interviews and an online questionnaire gauged administrators' perceptions of selected candidates' portfolios and how they might be used to help select teachers to hire. Based on preliminary feedback from administrators, candidates had opportunity to modify their portfolios each semester. Findings give evidence that administrators will use digital portfolios as a tool in the hiring process if they can easily access them, navigation is clear, and items they have traditionally used are still available. Administrators also viewed online video clips of candidates as a potentially powerful tool to help in selecting teachers to hire.

Introduction

As digital portfolio systems in teacher education programs become part of standard practice, an increasing number of research studies have examined their perceived value and use. Most of these studies seem to have focused on three dominant issues: candidates' written reflections and use of portfolios to promote reflective teaching practices, standards based assessment for candidates and teacher education programs, and various stakeholders' perceptions of digital portfolios, particularly the perceptions of candidates and faculty. Much less has been written about how administrators view digital portfolios and their use in hiring new teachers. The purpose of this study was to learn administrators' perceptions of teacher candidates' digital portfolios at a small Midwestern college. Equipped with this insight, we, the education program faculty, hoped to better advise our candidates in crafting their portfolios to position themselves more favorably in their quest for teaching jobs.

Since the fall semester of 2004, candidates in our teacher education program have been required to complete a digital growth portfolio. Organized around the Illinois Professional Teaching Standards, these portfolios have served as tangible evidence of meeting the standards and have been used primarily by the education department as a means of documenting professional growth in our candidates. Although our portfolio system was not specifically designed to help candidates find teaching jobs, several area administrators expressed interest in using portfolios to help screen potential employees. Some of our candidates also indicated that this was one of the values they saw in developing their portfolios, while others wondered whether administrators would even bother to look.

Review of Recent Literature

According to numerous studies, one of the chief values in the development and use of digital portfolios in teacher education programs is the way in which portfolios foster a more constructivist and reflective approach to learning (Avraamidou & Zembal-Saul, 2003; DiBiase, 2002; Milman, 2005; Robbins, 2004; Wetzel & Strudler, 2005). According to DiBiase (2002), the very process of developing one's portfolio promotes such a reflective approach to teaching and learning.

Other studies have pointed out the value of digital portfolios as a more authentic way of documenting progress toward meeting a set of standards (Herner, Karayan, McKean, & Love, 2003; Kilbane & Milman, 2003; Mullen, Britten, & McFadden, 2005; Pecheone, Pigg, Chung, & Souviney, 2005). One department chair from Johns Hopkins University explained the importance of portfolios for program evaluation and accreditation. "When you are up against NCATE standards and specialty organization standards…a fair amount of it can be hinged on their portfolios" (Wetzel & Strudler, 2005, p. 236).

In addition to their use in program evaluation, many teacher education programs use digital portfolio systems to validate individual teacher candidates' fulfillment of specific standards. Western Kentucky University, for example, documents how each candidate successfully completes critical performances at four levels in each of the Kentucky Teacher Performance Standards (Evans, Daniel, Mikovch, Metze, & Norman, 2006). Many programs also organize their portfolio systems around state and/or national standards such as INTASC, Interstate New Teacher Assessment and Support Consortium (Campbell, Cignetti, Melenyzer, Nettles, & Wyman, 2007; Hill, 2003; Johns Hopkins University Center for Technology in Education, 2006; Kilbane & Milman, 2003; Wetzel & Strudler, 2005).

Use of Digital Portfolios for Hiring

Although paper-based teaching portfolios have been used for a number of years in hiring teachers, only recently has the use of digital portfolios found its way into the teacher hiring process, and relatively few studies can be found on their use for this purpose. Research that has been done, while informative, is certainly not conclusive, and in some cases, inconsistent results have emerged.

Candidates' Perceptions

As noted, some of the literature notes teacher candidates' perceptions of how their digital portfolios might be viewed and subsequently used by administrators. Bartlett (2002), for example, found that candidates were concerned about whether anyone, and in particular principals, would actually look at their portfolios. Students at Arizona State University also wondered about the value of their portfolios for hiring (Painter & Wetzel, 2005). Most of these students noted that no one asked to see them so they did not have an opportunity to use them while trying to get a job. In contrast, several other studies pointed out that, to candidates, the most important function of their digital portfolio was to help them get jobs (Breault, 2000; Hill, 2003; Milman, 2005; Wright, Stallworth, & Ray, 2002; Young, 2002).

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Administrators' Perceptions

Do administrators even look at candidates' digital portfolios during the hiring process? Based on available research, the answer to this question suggests that routinely they do not. For example, Temple, Allan, and Temple (2003) reported that administrators valued paper-based curriculum vitae and cover letters and did not want to view electronic documents or even bother looking at portfolios in an electronic format. More recently, Painter and Wetzel (2005) confirmed these results stating, "At present, school district hiring procedures are not constructed to accommodate electronic portfolios" (p. 29). Similarly, of 259 principals surveyed by Brulle, Barwegen, Goreham, and Sale (2006), fewer than 50% viewed the use of digital portfolios as "important" or "very important" in the hiring process. Some research results, however, give hope that using such systems may become more prevalent if they are concise, streamlined, easy to read, and well-organized according to traditional hiring tools instead of professional teaching standards, commonly used as the organization structure in teacher education programs (Mosely, 2005; Painter & Wetzel, 2005; Pardieck, 2002; Temple et al., 2003).

Limited research suggests that the items administrators would prefer in digital portfolios are the same items they have traditionally relied upon throughout the hiring process. For example, Mosely (2005) found that the top requested item was a resume, followed closely by certification documents, transcripts, classroom management plan, and philosophy of teaching. An earlier study by Abernathy, Forsyth, and Mitchell (2001) found that principals most valued evidence of ability in classroom management, working with diverse learners, and examples of teaching strategies. These results were nearly duplicated by Brulle, Barwegen, Goreham, and Sale (2006); however, in this later study, letters of recommendation was rated as most important. Painter and Wetzel (2005), in a study similar to the present one, found that administrators most valued artifacts that gave evidence of a candidate's influence on student learning.

Although a video clip of a candidate's teaching seemed to be an item of interest to many administrators, the importance they placed on it as a tool for hiring varied widely (Abernathy et al., 2001; Mosely, 2005; Painter and Wetzel, 2005; Sullivan, 2004; Temple et al., 2003). Painter and Wetzel (2005) found that that such vivid evidence of a candidate's skills could be "a two-edged sword" and "could work against a candidate" (p. 28) just as easily as to give a candidate an advantage.

Setting

After much research into digital portfolio systems of other colleges and universities, and after investigating several commercially available portfolio products, our education department decided early in 2003 to develop our own Web-based system. This decision entailed, in brief, purchasing the necessary hardware, ensuring that development software was readily available for candidate use, writing a set of guidelines, developing evaluation criteria, creating templates organized around Illinois Professional Teaching Standards, training candidates to use the system, and initiating a technology fee to pay for the system. By fall 2004, our approximately 300 teacher education candidates in 12 certification programs had begun developing their digital portfolios, now a requirement for program completion.

Near the end of this semester, anecdotal evidence slowly began to emerge that some administrators actually did log on and view portfolios in areas where they had teaching vacancies. Further confirming evidence was documented at a January, 2005, P–12 Advisory Board meeting. Here we showed several candidates' portfolios to the members of the board, which included area principals, superintendents, and a special education cooperative director. The board had several encouraging comments and felt this was a great tool both for candidates and prospective employers. They stated that principals would like the fact that they could look at portfolios at their leisure and were particularly intrigued by videos of candidates' teaching.

These favorable responses to our candidates' digital portfolios did not seem to fit the pattern that most of the research noted earlier seemed to suggest. We wondered in what other ways responses from administrators, who were stakeholders in our program, would deviate from those in previous research studies. Also, even though initial responses from administrators were positive, we still were not convinced that most administrators would use the portfolios as part of their hiring process. Moreover, if they did use them, what would they view as most valuable for candidates to include for hiring purposes? Were video clips really as powerful as our P–12 Advisory Board members seemed to indicate? While some of our candidates thought that the primary reason for developing their portfolios was to secure a job, others wondered aloud whether anyone outside the college would ever see them. What could we honestly tell our candidates? Additionally, since their portfolios were designed as growth portfolios, we wondered how they could best be tailored to meet the needs of those who hired teachers. Could a system, designed to document fulfillment of professional teaching standards, also function as a means of enabling our candidates to find teaching positions? This study is part of a continuing attempt to answer these questions.

Methods

Participants

Since this was a qualitative study, the participants were purposively identified. We sought rich qualitative data from those who represented schools in which our candidates were the most likely to seek employment. Our teacher education program had some sort of relationship with these administrators, either through our P–12 Advisory Board, placement of our candidates in their schools for field or clinical experiences, or ties with graduates of our program. We deliberately targeted them since they and those like them are most likely to hire our graduates. In all, 23 school personnel involved in hiring teachers provided input. These participants included a K–3 principal, six K–8 principals, two 6-8 principals, five high school principals, a private special education school principal, a district superintendent, a private P–12 school association superintendent, a district director of instruction, a special education cooperative director, and two area teachers who have input into hiring. In addition, the director of our adult studies education program, who is a retired assistant superintendent, as well as a retired K–6 principal, who now serves the college as an adjunct professor, agreed to participate.

Data Collection

This study evolved as qualitative data from administrators gradually began to emerge. The first two phases were essentially focus group interviews, during which administrators viewed selected portfolios and offered their comments. Notes were taken of the discussions and minutes were produced. The next two phases were more rigorous attempts to gather more focused data. The third phase involved sending e-mail to 42 administrators, inviting them to view selected portfolios online and then complete an online questionnaire. The final phase was another focus group interview, which was videotaped and transcribed. After each phase, candidates had an opportunity to shape their digital portfolios based on our preliminary interpretation of feedback from participating administrators.

Phase 1

The first phase of seeking input on our portfolio system from our P–12 stakeholders was during a meeting of our P–12 Advisory Board in January 2005. Attending this meeting were a principal of a private special education school, a K–3 principal, a K–8 principal, a director of a special education cooperative, a high school principal, and two college faculty

members. We showed selected candidates' portfolios via projector, and opportunity was given for input. The board had several encouraging comments and seemed to reach a general consensus that prospective employers might also find the portfolios very valuable. Bolstered by their favorable responses, we informally shared this information with our candidates, most of whom forged ahead early in the semester, believing that their digital portfolios might lead to jobs. However, their reviews were mixed when it came time to actually pursue teaching positions. While some reported sharing their portfolios with principals, most, like candidates at Arizona State (Painter & Wetzel, 2005), did not have the opportunity to use them in their job search.

Phase 2

In September 2005, several selected portfolios were again presented via projector to the P–12 Advisory Board. Present at this meeting were a special education school principal, a private P–12 school association superintendent, a K–3 principal, a K–8 principal, along with two area teachers, both of whom had input into the hiring process. Also present were three college faculty members. During this focus group interview, members of the board were asked more specifically about the organization of the portfolios and the content they would like to see for hiring purposes. They offered their comments, and by consensus, the following general recommendations were made:

- Candidate's credentials should be available from a link
- The portfolio structure needs to be streamlined
- Much information on potential teachers is desirable but should be available by menu so principals can choose to view only selected areas
- Viewing video of candidates in action is desirable

This information was shared with the fall semester's student teachers, many of whom responded by adding a link to a credential file page as shown in Figure 1.

Phase 3

The first two focus groups served as a pilot study to help shape the next two phases, which were more rigorous attempts to gather focused qualitative data. To broaden the base of participants, while still focusing on participants with a particular interest in our candidates, in January 2006, we sent letters via e-mail to 42 administrators, inviting them to log on to our portfolio system and view seven selected candidates' portfolios. As noted earlier, these participants were purposively identified for their connection with the college. They were asked to complete an online questionnaire (Appendix A), which consisted of both objective and open-ended questions. Some of these questions, including six dealing specifically with video, asked respondents to rate the various elements of the portfolio, as *Critical*, *Somewhat Important*, *Not Very Important*, or *Insignificant* for hiring purposes, while other questions asked respondents to rank nine different portfolio elements in order of importance. Additionally, four questions were open-ended and invited comments. While 12 questionnaires were completed, two other principals viewed the portfolios and e-mailed comments without completing the questionnaire.

As preliminary results from the questionnaires became available, we shared our impressions with the spring 2006 student teachers, many of whom used this information to align their portfolios more closely to the ideal suggested by participating administrators. At this point, some candidates even added a link specifically labeled for potential employers.

Phase 4

The fourth phase of this study involved presenting some of these candidates' modified portfolios via projector to the members of our P–12

Figure 1: Example of top half of contents page adding a link to credential file.

Advisory Board at our May, 2006 meeting. The members present at this meeting were seven area school administrators along with four college faculty members. We examined the structure, layout, and content of the portfolios and also viewed edited video clips of classroom interactions that the candidates had included in their portfolios. A set of key questions (Appendix B) was used to guide the discussion, which was videotaped and transcribed.

The use of multiple sources of data, collected at various time intervals, provided data triangulation and helped clarify perspectives. As member checks, several study participants were also invited to read this manuscript and offer their feedback, which concurred with reported results. According to Patton (1990), such triangulation of data sources contributes to the credibility of the study and reduces the chance of bias.

Data Analysis

Qualitative data, including notes and minutes from the three focus group interviews at P–12 Advisory Board meetings, comments written on questionnaires, e-mailed comments, and the transcription of the last meeting were read multiple times and coded using a constant comparative method. Coding in this way involved looking for patterns, checking emergent categories against the data (Patton, 1990), arranging and rearranging into relevant categories, and then using the process of axial coding, which is reassembling data that were splintered during the initial coding process (Glaser & Strauss, 1967). Responses to Lickert scale items on the online questionnaires (Appendix A) were tabulated and mean scores were determined.

Results

Value of Digital Portfolios for Hiring

Administrators who took the time to view candidates' digital portfolios saw their potential for hiring purposes. In contrast to previous studies (Brulle et al., 2006; Painter & Wetzel, 2005; Temple et al., 2003), it is important to note that none of the 23 participants indicated that digital portfolios would not be valuable for hiring, while most commented on the perceived benefits and usefulness of the portfolios. One 6–8 principal seemed to speak for the group when she wrote, "I like the idea of perusing student portfolios online. This is definitely an avenue I would continue pursuing in the future."

There was also general agreement on the point at which administrators would choose to view candidates' portfolios. Most indicated that they would use them once the candidate pool had already been narrowed down for a position, but before deciding whom to interview. One high school principal noted,

Table 1: How Administrators Rated Importance of Digital Portfolio Items for Hiring

Resume	3.92
Introduction page—certificate/endorsement information	3.75
Formal evaluations	3.67
Video of teaching	3.45
Artifacts giving evidence of technology skills	3.45
Philosophy of education	3.33
Reflections on artifacts	3.08
Artifacts giving evidence of meeting standards	3.00
Action research—evidence of impact on student learning	2.92

4 = Critical
3 = Somewhat Important
2 = Not Very Important
1 = Insignificant

Table 2: How Administrators Ranked Digital Portfolio Items in Order of Importance

Resume	2.33
Introduction page—certification/endorsement information	2.82
Formal evaluations	3.73
Philosophy of education	4.45
Video of teaching	5.09
Artifacts giving evidence of meeting standards	6.18
Artifacts giving evidence of technology skills	6.37
Reflections on artifacts	7.09
Action research—evidence of impact on student learning	7.45

1—highest rank, 9—lowest rank

> I would not use the online portfolio until the candidate was being considered for an interview or in the top 3-5 candidates…I would thoroughly study the online portfolio once the candidate was considered to be a top candidate. One advantage is that members of our interview teams would be able to view them individually prior to an interview.

Offering an additional perspective regarding the opportune time to view portfolios, one principal of a small private high school stated,

> Right from the start, I would use it to see what kind of prospective teachers will be entering the teaching workforce. I would check this out even if we are not currently hiring to continue to get a sense of what kind of students are graduating.

Representing a small school that hired relatively few new teachers, this principal viewed candidates' portfolios as not only a tool to help in the hiring process, but even when not hiring, as a means of keeping abreast of the type of candidates that were coming out of teacher education programs like ours.

Portfolio Structure and Contents

In May 2006, after many candidates had made changes to the organizational structure of their portfolios based on information from completed questionnaires, most administrators in the final focus group agreed that while a little variety in structure could show individuality, too much would make portfolios difficult to navigate. One high school principal summarized, "I like diversity, but I think if…I've got to work to find information, then I'm probably not going to work real hard to get it."

Confirming to some extent Mosely's (2005) results, the administrators who completed the questionnaire rated their familiar and traditional hiring tools as still the most important, even when these items were part of digital portfolios. As shown in Table 1, the highest rated items included a resume, introduction page with certification and endorsement information, and formal evaluations. Diverging from results of previous research, however, video of a candidate's teaching was viewed as relatively important, scoring 3.45 on a 1-4 scale. Although some items were rated as *Not Very Important* by some administrators, the mean of all items was rated at least *Somewhat Important*, and no item was seen an *Insignificant*.

The questionnaire also asked respondents to rank each of nine portfolio items 1–9. Table 2 shows, again, that resume, introduction page with certification information, and formal evaluations were at the top of the list. Action research, meanwhile, which gives evidence of a candidate's

impact on student learning, was ranked as either eighth or ninth by most administrators, making it the lowest ranked item. This is in sharp contrast to the findings of Painter and Wetzel (2005), whose participants valued evidence of candidates' influence on student learning more than any other portfolio artifact.

Value of Video Clips

Because initial focus group responses to candidates' video clips were so favorable, we included in the questionnaire some specific questions about various features of video for hiring purposes. As shown in Table 3, seeing various aspects of a candidate's teaching, commentary on what occurred in the video clip, hearing the candidate's voice, and having written reflections on what occurred in the clip were all viewed by most administrators as critical or somewhat important. On the 1–4 scale, each of these was rated at least 3.33.

Even more insightful were comments, which highlighted the perceived benefits of video clips. For example, one high school principal ranked video as seventh out of nine items in importance, but still commented, "I found the video clips helpful in seeing how the teacher interacts in a live setting." A retired K–6 principal saw video as a means of giving candidates from our program an advantage over those from other teacher education programs: "This would be an extremely important tool that many candidates from other institutions would likely not have." Similarly, the other principals, not having seen digital video used by other institutions, could hardly contain their enthusiasm. One wrote, "The video clip would trump a resume alone…It is a powerful tool! I love it!"

To help them select teachers to hire, administrators wanted candidates to include in their video clips evidence of what the objectives of the lesson were, reflective commentary by both the candidate and the supervising teacher, and evidence of effective presentation skills. Summarizing the thoughts of several, one 6–8 principal said, "It would be good to know what the objectives of the lesson were. Before and after reflections of the teacher would be helpful." After viewing some clips in which candidates had used text overlays, a K–8 principal suggested that candidates could inform viewers of their objectives in this way: "Maybe the objective could be there as captions, 'I'm trying to—' you know, whatever the skill is they're trying to get. 'Today's lesson is, the objective of this lesson is…'"

Administrators also wanted to see candidates' personalities shine through their video clips. In fact one K–8 principal reasoned that the video needed to "focus on the teacher's personality." Besides watching teaching technique, administrators wanted to get to know somewhat the person behind the teaching through their video clips. A K–3 principal suggested that a sort of self-introduction might accomplish this:

> I think it would be nice too, even in the video, if the candidate said, "I'm so and so and I'm looking for a job, and this is what I'm bringing to the table." You know, just kind of making a candidate statement.

Table 3: Importance of Video Features

	Critical	Somewhat Important	Not Very Important	Insignificant	Mean Rating
	4	3	2	1	
Video presents various aspects of candidate's teaching	42%	58%			3.42
Video includes candidate's commentary on what occurred	42%	50%	8%		3.33
Video includes audio of candidate's voice	67%	17%	17%		3.50
Candidate included written reflection on what occurred in the video	33%	67%			3.33

Realizing the limitations of a short video clip for displaying teaching skills, a high school principal indicated that he would settle for getting to know the person:

> I know I'm not going to get a lot out of his teaching in a couple of minutes, but I just want to see how he talks, and I like to see a little presence in front of kids and stuff like that.

A final shared preference was evidence in the videos of how students in the classroom respond to the candidate's teaching. After viewing a video clip of a PE candidate teaching badminton skills, one K–3 principal commented, "I would like to have seen the children demonstrate what they learned from his instruction." A K–8 principal also noted, "I would much rather see an interactive lesson than a lecture lesson because that's when you know how kids respond, and you see the teacher's personality come through the students." For her, seeing the response from the students was the best way to see the candidate's personality.

Most administrators were in agreement that a candidate's video clip should be about 3-6 minutes long. As one 6–8 principal noted, "The video clip should not be longer than five minutes. There just isn't enough time to screen as many applicants as we need to if the clip runs longer than this." A potential problem with longer video clips was noted by a K–8 principal: "A couple minutes is enough. It took too long to download on my computer. I became impatient. Any longer and I might have just skipped them." Only one other participant noted a problem in viewing the video clips, but she admitted that she likely did not have a viewer installed.

Just as Painter and Wetzel (2005) noted how a candidate's video clip could be "a two-edged sword" (p. 28), administrators in this study stressed just how critical a video clip could be in trying to secure a job. One high school principal wrote:

> If the video is good, it can win the job. But if I see something I don't like, it can also kill the candidate. The video is very revealing and must be taped and edited with utmost care…If the clip is not favorable, it could disqualify a candidate.

Another high school principal, after viewing a different set of video clips and having already praised their value, reinforced the same concept: "These people ought to be really careful about how they [portray themselves]. They could sink or swim here."

Discussion

Before viewing our candidates' portfolios, most of the administrators in this study indicated that they had not seen any digital portfolios from any teacher education institution. We suspect that this may be true of many, and perhaps most, other administrators. We contend that one of the major reasons that this tool is not used more routinely is that administrators simply do not know about it. Once the administrators in this study were made aware of our candidates' portfolios, they all decided that they could and would afford them an instrumental role in their hiring process. One key to their more widespread use is to make their existence

known. We have decided to do this by sending letters to approximately one thousand administrators early in the spring semester, informing them of our candidates' portfolios and giving them access information. We have also provided a separate link on our college Web site specifically to the portfolios of candidates who are in their final semester.

Another key to their use is that the structure of the portfolio is streamlined, simple, and conducive to finding quickly the items that busy administrators want to see. These include a resume, information about certification and endorsements, formal evaluations, and, as Painter and Wetzel (2005) had hoped, a video of the candidate. Since they could still view the traditional items the old way—paper-based, video was a major enticement of the digital portfolios. Video gave them additional insight before the point of an interview that previously was not available. They definitely saw the value and seemed almost enamored by the revelations such a tool could afford.

Using administrators' input throughout the course of this study, many of our candidates shaped their portfolios to conform more closely to what participating administrators preferred. Initially this meant simply adding a link to credential files, while later many candidates provided a link specifically for potential employers. Based on ongoing administrator feedback from the various study phases, many candidates, in effect, split their portfolios to be used for two separate purposes. In this way, since they were not yet program completers, they could keep what they needed for evidence of professional standards fulfillment while directing administrators to a streamlined section specifically for their use (Figure 2, page 94).

Are administrators ready to include digital portfolios as a part of their routine process in hiring teachers? According to the 23 participants in this study, yes, they are ready; however, they are more likely to make use of the portfolios after a candidate is among the final few for a position rather than as an initial screening instrument. Interestingly, the results of this study do not agree with Painter and Wetzel, who concluded that "school district hiring procedures are not constructed to accommodate electronic portfolios" (p. 29). Most school districts and private schools have the technology in place, administrators love the concept, and those who have seen our candidates' portfolios have committed to using them. The problem then is not that hiring procedures cannot accommodate digital portfolios; rather, it is that administrators are not aware of them, do not have easy access, or become lost or overwhelmed by what they find. Results of this study have indicated that with a few interface changes with clear navigation to what administrators prefer, the same digital portfolio can serve as both a means of demonstrating fulfillment of professional teaching standards and as a beneficial tool for hiring.

What Do We Tell Our Candidates?

As noted earlier, the purpose of this study was to learn how our candidates could best shape their digital portfolios in order to position themselves more favorably for securing teaching positions. While we have shared preliminary impressions with our candidates throughout the course of this study and have witnessed the gradual transformation of many of their portfolios, we still cannot say that they now fully meet the needs of both hiring administrators and college faculty; we will continually seek the feedback of our stakeholders. However, we now believe we have enough

Figure 2: Example of a prospective employer's page

evidence to assure our candidates that if they make it through the initial screening process and administrators are made aware of their portfolios, they will likely use this tool to help them determine if our candidates are the teachers they want to hire. We are now also better positioned, based on accumulated data and more thorough ongoing analysis, to offer the following advice, addressed to our candidates, but likely applicable to those in similar teacher education programs:

- Make administrators aware of your portfolio by including a link to it in e-mail and by including the URL in your paper cover letter and resume.

- Add a *Potential Employer* or *Administrator* link to your first page, splitting your portfolio into an academic side, which demonstrates that you have met professional teaching standards, and a showcase side, which makes it easy for administrators to find what they want.

- Include specific examples of what you can do for them, such as a brief *PowerPoint* presentation, a WebQuest, or a multimedia project you have developed. Since administrators will not spend much time reading your work, examples like these can show your competence in planning instruction more quickly than printed pages can, while also giving additional evidence of your technology skills.

- Tape and edit your video clip with utmost care, recognizing that it is a powerful and persuasive tool designed to sell *you*. Administrators expect you to edit out anything that does not present you at your best, so make sure that you tape enough that you can be very selective. While a great video can land the job, a poor performance can lose it.

- Eliminate all mistakes. A misspelling could be all it takes to make administrators move on to the next candidate. As one high school principal emphasized, "Errors can be very discouraging to someone looking for the perfect teacher!"

Conclusion

The results of this study underscored administrators' relative lack of awareness of teacher candidates' digital portfolios, and secondly, their willingness and even eagerness to use digital portfolios in selecting teachers to hire. Administrators appreciate the use of video in particular, as a powerful tool, serving as a bridge between text-based materials and a personal interview. Given the responses of administrators in this study and the rapid rise and prevalent use of digital portfolios in teacher education programs, it seems inevitable that it is only a matter of time before digital portfolios replace traditional paper tools as the standard in teacher hiring practices.

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Appendix A

Online Questionnaire

Your name (This will be kept confidential):

Your position (i.e. principal K–6, secondary human resource director):

From your perspective as one who plays a role in hiring teachers, please rate the importance of each part of the portfolio.

1. Introduction page—certification/endorsement information

    Critical   Somewhat Important

    Not Very Important   Insignificant

2. Resume

    Critical   Somewhat Important

    Not Very Important   Insignificant

3. Philosophy of education

    Critical   Somewhat Important

    Not Very Important   Insignificant

4. Video of teaching

    Critical   Somewhat Important

    Not Very Important   Insignificant

5. Artifacts giving evidence of meeting standards

    Critical   Somewhat Important

    Not Very Important   Insignificant

6. Reflections on artifacts

    Critical   Somewhat Important

    Not Very Important   Insignificant

7. Artifacts giving evidence of technology skills

    Critical   Somewhat Important

    Not Very Important   Insignificant

8. Action research—evidence of candidate's positive impact on K–12 learning

    Critical   Somewhat Important

    Not Very Important   Insignificant

9. Formal evaluations

    Critical   Somewhat Important

    Not Very Important   Insignificant

For each item below please order (1-9) according to its importance for hiring purposes.

_____ Introduction page

_____ Resume

_____ Philosophy of education

_____ Video of teaching

_____ Artifacts giving evidence of meeting standards

_____ Reflections on artifacts

_____ Artifacts giving evidence of technology skills

_____ Action research—evidence of candidates' impact on K–12 student learning

_____ Formal evaluations

Please rate the importance of each aspect of video clips.

10. The video presents various aspects of the candidates' teaching rather than only one lesson.

    Critical   Somewhat Important

    Not Very Important   Insignificant

11. The video includes commentary on what occurs/occurred.

    Critical   Somewhat Important

    Not Very Important   Insignificant

12. The video includes audio of the candidate's voice.

    Critical   Somewhat Important

    Not Very Important   Insignificant

13. The candidate included a written reflection on what occurred in the video.

    Critical   Somewhat Important

    Not Very Important   Insignificant

How could the video be used most effectively to help a candidate secure a teaching position?

About how long do you think a video clip should be?

What do you think of the organizational structure (the way links and pages are arranged) of the portfolios? What type of structure would be most beneficial to you for hiring purposes?

At which point in the hiring process do you think you might use the online portfolio?

How do you think the online portfolios should be modified for hiring purposes?

Is there anything we should know that the questionnaire left out?

Appendix B

Focus Group Guide Questions

1. Would you use the digital portfolios as part of the hiring process? How might you use them? When would you view them?

2. What do you think of the structure (the way links and pages are arranged) of the portfolios? What type of structure would be most beneficial to you for hiring purposes?

3. What parts of a portfolio would you want to see?

4. Is a video clip useful to you? Beneficial to the candidate? How important is it?

5. What should the video show? How could candidates best use it to sell themselves?

6. Should the candidate discuss what happened on the video? Explain flaws or what should have been done?

7. About how long do you think a video clip should be? Is the 2-3 minutes long enough?

8. Is online the best place to have the portfolio? Better on CD?

9. What are your overall impressions of the portfolios for helping in the selection of teachers?

10. Is there anything we need to know that we haven't touched on yet?