Narratives of Learning: The Personal Portfolio in the Portfolio Approach to Teaching and Learning

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Abstract

This paper will explore how a portfolio approach to teaching and learning can help the educator incorporate unique forms of reflective practice into his or her daily work. By being able to express ideas more clearly to himself, the educator can better promote the relational construction of knowledge in his educational communities. This paper, as part of a larger body of research asks, how can a portfolio approach to teaching and learning help the educator develop unique forms of reflective practice that will help him express his ideas more clearly, first to himself and then secondly to his educational communities? Research methodology is primarily participatory action research and includes an autoethnographic review of the author's work, reviews, interviews, observations, and focus groups with student teachers and professional teachers in the United Arab Emirates. The research concludes that in consideration of McLuhan's (1964) notion that the "medium is the message," the interactions that arise through the use of new media tools can lead us to relational, co-constructed ideas that are not those simply passed on from other texts. By making our thinking visible, the portfolio approach allows the educator to capture the contextual relationship between the author, the audience or community, and the knowledge being created.

Keywords: portfolio, relational construction, education, scholarship, reflection

Introduction

Education is a community affair. As members of an educational community, we are active in its, and our own, development. Gergen (2009a) comments that, "Education in a relational key is critical to the global future" (p. 243), and adds that we are engaged in co-constructing our own self with those around us (Gergen, 2011). Camargo-Borges and Rasera (2013) note that, "individual rationality is not conceived of as an attribute of individual thinking but as a consequence of cultural convention" (p. 2). That is, our individuality gains appreciation and value to others through their interpretations of our "being," not

through our own interpretations of ourselves. Similarly, Ismael (2007) describes the concept of the non-reflexive "I" as the notion that others have of us and our ideas formed outside of our control or influence.

To balance these ideas of how others influence our individuality, Kelchtermans (2009) comments that "It matters who the teacher is" (p. 258). Within any educational community, the teacher's individual narratives of learning provide guidance and focus for the classroom, virtual or otherwise, in which they are being shared. These narratives are often highly contextual, especially when drawn from community experiences. For the educator, the narratives provide a starting point from which they can reflect on their ideas. They also support their students and peers by providing additional dialogues on community questions that arise from the course content and assessments.

By taking our experiences figuratively out of our head and combining them with the proper media, we can create narratives of learning, which can be manipulated very much as tangible and discrete objects. McLuhan's (1964) notion that "the medium is the message" suggests that the proper choice of media can help the teacher more clearly strengthen their narratives. More specifically, Mayer (2003, 2009) highlights how the intentional use of multi-media can help students to better understand complex ideas. Figure 1 offers a model of how to create such a narrative.
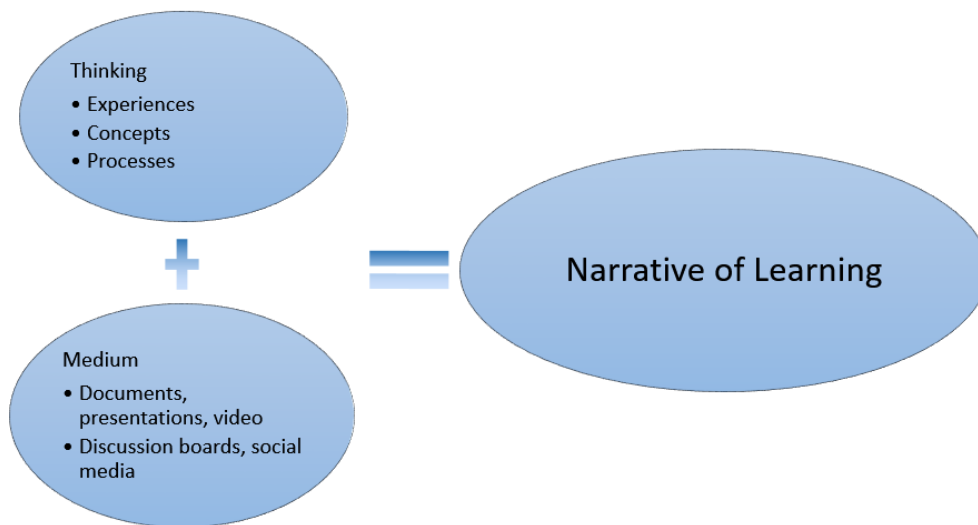

Figure 1. A narrative of learning.

By making our thinking visible first to ourselves through intentional creations of narratives of learning, for example in the form of written reflections, class notes, or other presentations of information and processes, we can then better reflect on, and learn from, these experiences. In turn, we can then present more clearly articulated and coherent narratives to our colleagues, and so create conditions under which our communities can flourish.

However, the profusion of materials produced through new media can be overwhelming. Gergen (1991) notes that "Social saturation furnishes us with a multiplicity of incoherent and unrelated languages of the self" (p. 6), allowing us to get lost in our myriad communications. Additionally, studies into the efficacy of technology (Bainbridge, 2014; Esterhuizen, Blignaut, & Ellis, 2013; Reedy & Goodfellow, 2014) still find resistance to technology in higher education.

If, as Freire (1998) notes, educators must create "the possibilities for the production and construction of knowledge" (p. 30), a portfolio approach as a process may help educators more readily present coherent narratives to their communities. As Freire (1996) also tells us, the truly reflective and liberated educator, "presents the information to the students for their consideration, reconsiders her own considerations as the students express their own" (p. 62).

A Portfolio Approach to Teaching and Learning

Given the range and complexity of practitioners' daily work, we will be better served by an intentional and unifying approach to piece our experiences into coherent artefacts and processes. Elsewise, we may be in danger of viewing our various artefacts, in Freire's (1996) words, as merely, "contents, detached from reality, disconnected from the totality that engendered them and could give them significance" (p. 52).

In this paper, the term "portfolio" will refer to electronic workspaces to reflect our reliance upon technology and new media as tools with which to embrace and embody a relational philosophy. In deference to the influence of Schon's (1983) work, *The Reflective Practitioner*, the term "practitioner" will be used to refer to those who maintain a portfolio.

Significance of the Problem: Reflective Practice

While reflection is held to be an integral part of many teacher education programs (Higher Colleges of Technology, 2014; Gleeson, Leitch, Sugrue, & O'Flaherty, 2012), many practitioners find that the reflective process often does not produce useful results. Additionally, many reflective practices are often viewed as "add-on" activities that are very difficult to incorporate into meaningful daily activities.

However, consider the weight given to "experience" and the idea that experiential learning, as expressed by Kolb (1984), is in essence a form of reflective practice. When discussing the experiential learning model, Kolb (1984) introduces the concept of "the time span of discretion" (Jacques, 1979, p. 125) in order to argue that higher order work requires a greater "integrative complexity" (p. 131) and "adaptive flexibility" (p. 213).

Providing a means to support a continuous curation process for narratives of learning over time would help practitioners grasp the larger context of their work. The greater the time span of a practitioner's discretion, the better the narrative that practitioner will be able to share. The greater the time span, also the greater sense of self-determined learning a practitioner can enjoy. From a social construction point of view, we do not only benefit from our own experiences and others', but we actually develop new realms of practice by co-creating knowledge. It will be argued that a portfolio approach to teaching and learning can foster better reflective practice and support the social construction of knowledge.

Research Design and Methodology

This research paper is based on social construction, and asks the question, how can a portfolio approach to teaching and learning help the practitioner develop unique forms of reflective practice that will help him express his ideas more clearly, first to himself, and then secondly, to his educational communities?

This paper is part of a larger PhD research conducted in the context of the United Arab Emirates (UAE), having the first author as the principal investigator, and as subject of the research. The investigation looked at the author's portfolio, which was used for teaching and learning activities over a five-year period. It also looked at the portfolios of four cohorts of female Education students, who used their portfolios as teaching tools over differing spans of time from two to four years, and professional teachers from several primary schools who developed and used their portfolios for teaching and learning their students over a one-year period. These teachers included both Emirati and non-Emirati teachers from other Arab countries including Egypt, Jordan, Iraq, and Lebanon.

The research pursued an iterative, participatory action research model, where the participants had an active voice in the creation of the processes involved in the use and design of their portfolios, and in the interpretation of the results from this use. The Education students had great flexibility to design and use their portfolios as teaching tools, with guidance from the author, and with feedback from each other and their own students when on teaching internships. Their portfolios served several purposes including reflective practice, assessment tools, and as teaching and learning tools to present ideas, or narratives of learning, to students.

Similarly, the primary school teachers received guidance from the author through weekly workshops spanning one academic year in which they experimented with the use of media to create their own narratives of learning to be shared with their students, students' parents, colleagues, and stakeholders.

In both cases with the education students and the professional teachers, in addition to being used for teaching and learning, their portfolios also served as demonstrations of competency. The education students used their portfolios to record reflective writing, preserve samples of their teaching activities, and as presentation tools for assessment. The professional teachers also used their portfolios as presentation tools when going through their annual performance reviews with their school principals.

This iterative process was captured in sequence and results continually made available for sharing of best practices through the very portfolios under study, including the author's portfolio. Over these time spans, the participants were able to review their own, and each other's work, make adjustments, and continue in the iterative cycle.

Data collection methods included an autoethnographic review of the author's portfolio with more than five years of student interaction and feedback. A quantitative analysis of the author's portfolio was also conducted. Qualitative analysis of all portfolios occurred at several points through the research period, in addition to the assessment and review periods, in order to share best practices and obtain feedback from users of the portfolios.

Structured focus groups were conducted with both the Education students and the professional teachers at several points. In the case of the education students, the cohorts who participated over the longer time spans conducted several focus groups spanning up to three years. Formal, individual interviews were conducted near the end of the final year of the research with individual volunteers from among the education students and the professional teachers, as well as with various stakeholders including cooperating teachers of the education students, and school principals as supervisors of the professional teachers.

Much of the analysis focused on the participants uses for their portfolios as teaching and learning tools. Arising out of the longitudinal and iterative participatory action research cycle, the feedback from participants indicated that the uses for the portfolios could be divided into the following overlapping spheres of intentionality based on participants' intentions for that work: the personal sphere; the community of inquiry sphere; and the demonstrations of competency sphere. Some of the data collected were used to examine these various purposes, which are outside of the scope of this paper but within the scope of the wider research project.

By viewing their activities in terms of intentions, the participants were able to define clear processes to help manage the complexity of teaching and learning including preparing for teaching, teaching and learning in the classroom, assessing learning, supporting teaching and learning outside the classroom, and reflection in preparation for the next class. When defined as a process, the practitioner creates narratives of learning, and curated collections of narratives encapsulated in a variety of media. These narratives are then shared with their educational communities through teaching and learning activities in class time with students, and outside of class time with colleagues, through the community of inquiry sphere of processes. As community members interact with the narratives and each other, cognitive dissonance gives rise to discussion and feedback. At any point, this work can serve as a snapshot of inspiration as well as a demonstration of competency.

Portfolio in Practice

One of the core features of every portfolio is a "blog." Blog posts can incorporate virtually any form of media including video, presentations, documents, images, text, and content hosted on other sites. It is this technical functionality that affords the development of unique narratives of learning from the practitioner. The author, the education students, and professional teachers employed a variety of other tools including other social media, interactive tools such as synchronous document editing (Google, 2016) and audience response systems (Poll Everywhere, 2016) which were embedded and used within these sites.

While most blog sites were hosted on Blogger.com (Google, 2016) in order to synchronize with other Google tools, the author's portfolio employed an open source software platform called Joomla (Joomla!, 2014), which is hosted on a commercial web service for a small monthly fee (http://www.paulleslie.net). While many different providers such as Blogger.com offer this service for free, paid service affords additional benefits including ownership and data security, a wider choice of features, technical support, and greater control over the look and functionality.

Reader access to all of the blogs was open. Much of the online interactions based on the contents in the education students' and professional teachers' portfolios were conducted through a variety of social media tools including the comments feature of the blogs. Online interactions based on the author's blog were predominantly conducted using institutional platforms for record keeping and assessment purposes.

The author's blog posts were categorized and cross-categorized into a range of topics from weekly posts specific to each class, to regular reflective posts that are timely to general themes, and are also meta-tagged for ease of retrieval. Each category can then be linked and further organized through a variety of menus. An embedded search engine supports the portfolio. At the time of writing, the portfolio contained 74 categories and 587 individual posts, spanning more than five years of usage. The blogs of the education students and teachers were similarly categorized, but differed in complexity and quantity.

Beyond merely serving as reflective activities, these posts serve as the basis for content delivery, classroom activities, points of discussion for colleagues, administrative data and instructions, and all together combine to act as a demonstration of competency.

The Process of Social Construction of Knowledge: The Time Span of Discretion

The following description serves as an exemplar of how the portfolio can support the social construction of knowledge. In an effort to describe the intrinsic value of experience, the author developed the following set of board notes, shown in Figure 2, that describe the time span of discretion. These notes were created in a face-to-face class as the students watched and asked questions, thus providing greater context to the discussion. In this sense, the diagram is an example of the iterative reflective process that supports co-created relational knowledge.
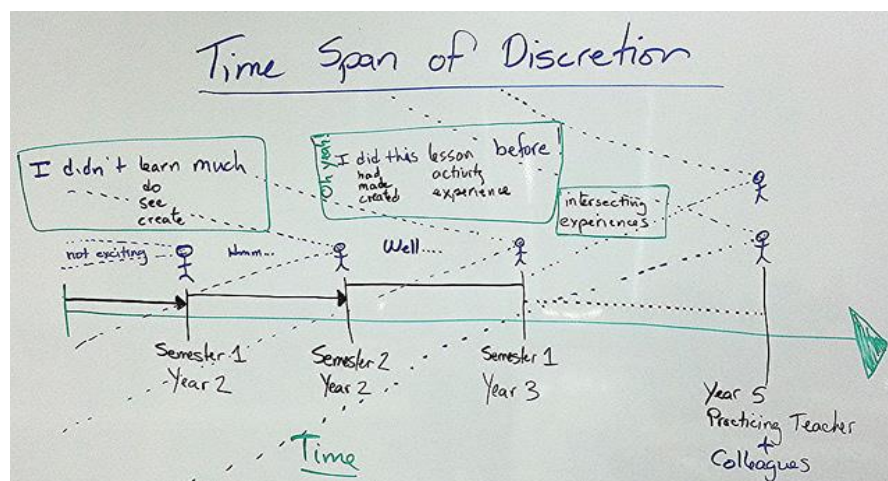

Figure 2. Board notes from class discussion on the time span of discretion.

Once completed, these notes were photographed, added to an online board-notes photo album, and then embedded in the weekly blog post for that class. The students were then able to access this diagram for further reference. The same post could then be shared with other classes to spur further co-creation of

knowledge, and the relational dialogues with new audiences can be captured and integrated into the blog post to capture the essence of the relational dialogue as it happens. Since this topic is of particular importance, especially for many faculty, the author further transformed the board notes into a more coherent, readable format, as shown in Figure 3.
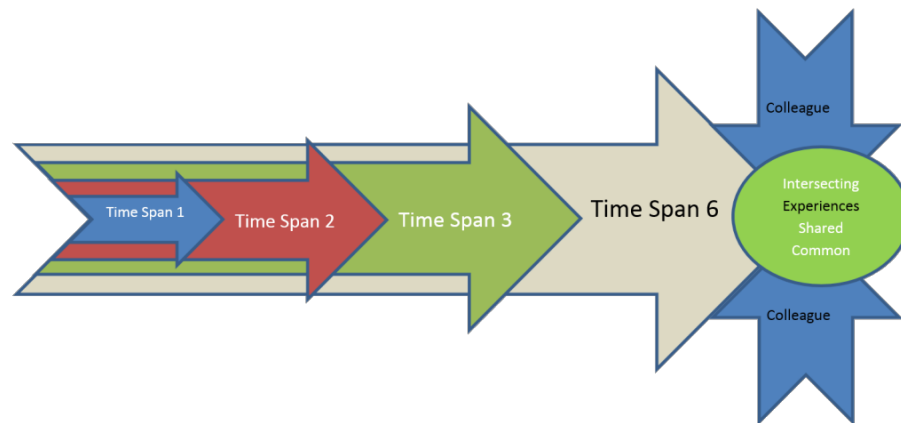

Figure 3. Time span of discretion as derived from Jacques (1979).

In this figure, the relationship to the original board notes can be clearly seen. This diagram was shared in a different blog post for other students and peers. In this manner, the social construction of this concept is clearly documented. At the time of writing, the page has been hit 885 times indicating that it has reached a wider section of the college community.

Discussion of Findings

A precept of social construction is that the individual exists in relation to others. In this case, the students have a clear, if implicit, example of how their own ideas shape, and are shaped, by those around them, and highlights how all participants can be influential in the construction of knowledge. The process of developing the time span of discretion diagram also contributed to the author's understanding of the concept.

The non-reflexive potential is also clear through the wider audience that this, and other posts, are reaching. For example, posts are generally directed at one or two cohorts of students. However, as Figure 4 shows, many posts have been viewed thousands of times thus extending the reach of the content.

⇕	☐	Title	Category	Author	modified by	Created	Modified	Hits ▾
⋮	☐	English, Arabic... or French?	Reflections on Teaching and Learning	Dr. Paul Leslie		05/01/2011 - 23:14	Never	7998
⋮	☐	Collaborative Consumption	Articles 2012 - 2013	Dr. Paul Leslie	Dr. Paul Leslie	04/01/2013 - 03:02	05/01/2013 - 14:07	7608
⋮	☐	EDUC 403 - Week 7 - What are you at?	EDUC 403	Dr. Paul Leslie	Dr. Paul Leslie	19/10/2012 - 21:57	21/10/2012 - 02:56	7278
⋮	☐	Presentation: Community of Inquiry - Discussion Boards and Assessment.	Publications & Presentations	Dr. Paul Leslie	Dr. Paul Leslie	30/03/2013 - 01:23	10/05/2014 - 13:52	7097
⋮	☐	Add Comments to a Portfolio Page	Mahara Portfolio - How to ...	Dr. Paul Leslie	Dr. Paul Leslie	16/11/2013 - 05:58	20/10/2014 - 00:11	6730

Figure 4. Top five posts in any category from 2011 – 2015.

The initial posts and discussions may represent synchronous co-creation of new knowledge as in the time span of discretion example, but the overwhelming majority of knowledge is created asynchronously. This has strong implications for online and distance learning as well as blended learning forums. Ismael (2007) discusses the difficulties that we have of trying to reconcile reflexive and non-reflexive views of ourselves. The quantity of hits on this work forces the author to consider what interpretations others will take away. How do we combine the view we have of ourselves with the view that others have of us, and why is this important?

One of the ways to reconcile the reflexive and the non-reflexive "I," is through the ability to edit our thoughts and experiences. The blog archives are a clear demonstration of the social construction of knowledge in that the original posts were written and rewritten in conjunction with feedback from the education community in a blended and online learning environment. It is argued that the importance of reconciling the reflexive and the non-reflexive "I," lies not in the reconciled ideas, but in the act of reconciliation.

In this manner, the media allows us to extend the relational space to include wider audiences across time, allowing the author and the educational community time to reflect and bring yet more refinement to the ideas under discussion. Given the importance of being able to demonstrate reflective practice, the educational community widened the discussion of the time span of discretion as evidenced by the number of hits in order to promote an even wider relational dialogue.

One or more years later, it is possible to browse the links and actual progression of ideas and discussions that took place in the classroom, blended, virtual, or distance. This may be an example of co-creating knowledge with a previous version of myself. When recycled into my current classroom, the new interpretations again go through the learning cycle described above and are edited and co-created into current, contextualized knowledge.

The ability to employ a range of new media to convey narratives of learning allows the participating community the luxury of time to consider the ideas, and comment through individual feedback, public comments on discussion boards, or face-to-face comments.

Portfolio as Medium

One significant finding from the span of time involved in the portfolio of work is an awareness of, and access to, the accumulated wisdom that has been gathered from the relational dialogues with students, peers, and colleagues. As Ismael (2007) notes, "It isn't until a network of pathways is set up between pockets [of information] that the full potential of the additional structure is realized" (p. 5).

Rather than view the span of reflections and narratives contained in the portfolio as a static set of ideas, they can be viewed as a medium through which we can promote the relational construction of knowledge for ourselves and for our community. By putting our ideas on full display to our community, we are inviting what Kelchtermans (2009) describes as "discomforting dialogues" (p. 270). When others have questions, they have usually experienced cognitive dissonance with something in the portfolio. These questions challenge us to think more clearly about our ideas.

When transposing these concepts to the portfolio approach, they serve to help us understand how we are creating knowledge. In the reflexive view, we are consciously putting our ideas out into the world though our personal portfolios. The reflective act of writing allows for a progressive ability to better represent ideas. The media does transform the message and by gaining experience through many posts and feedback from stakeholders, better choices can be made about how to construct our narratives of learning. The portfolio as a medium allows us to interact with our educational community in the ways described above and allows the audience to interact with our ideas with or without us present.

The portfolio allows us the chance to challenge current thinking without the need to conform to wider sensibilities. It is argued that the portfolio approach helps to provide what Freire (1998) calls *methodological rigor* by providing a space for the "production of the conditions in which critical learning is possible" (p. 33).

It is also argued that there is an obligation to be audacious and to make our thinking visible. This pedagogy of freedom has a liberating influence on our ideas. Certainly, the knowledge of audience is a very powerful motivator as has been noted in previous research (Leslie & Murphy, 2008). Freire (1998) also tells us that "Proper to right thinking is a willingness to risk" (p. 41). The practitioner must not only be free, but be willing to act on their freedom. The process of on-going reflective practice so valued in the teaching profession is not a practice if left until the end of a semester.

Conclusion

A portfolio approach creates conditions through which we can manage and present our ideas to our community, let that community see our ideas, and then give us feedback. There is a value in being able to

reinvent ourselves as we mature and grow. Indeed, we often talk about the concept of transformation and hold this notion as an ideal to which we must always aspire.

This is what Freire (1998) labels "critical learning" (p. 33). In the personal sphere, critical learning starts with ourselves as practitioners. We must first reflect upon our own understanding of concepts, before we can understand and accept others' differing ideas, especially about our own notions.

From these narratives of learning emerge a greater understanding of our own identity as a professional. Schon (1983) discusses the issue of how do we provide evidence of the "artful competence" that we display every day in our work. One way of providing this evidence is through a greater array of narrative. The process of explaining ideas and tailoring the explanations to the needs of the class at the time adds a richness to the resulting notes and collection that could not be achieved if working in isolation. The approach offers a means to make sense of one's world and be able to share that sense with others.

We can create practical reflective practices that encourage the practitioner to turn their reflective practice into research-informed practice. McLuhan (2003) discusses the idea that, "one of the peculiarities of the electric age is that we live simultaneously in all of the cultures of the past" (p. 213).

Gergen (1991) cautions that the growth of technology is leading to a saturation of our "self," commenting that, "an open slate emerges on which persons may inscribe, erase, and rewrite their identities" (p. 228). However, Gergen (1991) also discusses the "fascinating play of potentials and an increased sense of relational reality" (p. 229) that comes from being able to "rewrite our identities."

Community Echo

One interesting concept that arose was the concept of *Community Echo*, a term coined by one of the project participants. As the community members were drawn to specific narratives of learning in her portfolio, they were in turn exposed to other narratives she had shared, not directly related to their original associations to her work. This type of non-reflexive notice gave her a genuine sense of value for her work because it arose naturally out of unsolicited responses to her work. This is a significant relational narrative because of the spontaneous feedback that it prompted.

Practical Recommendations for Educators and Educational Institutions

The time is ripe for a portfolio approach to teaching and learning to be built upon 21st century tools, which are readily available, highly adaptable, and easy to learn. A portfolio approach supports the scholarship of teaching and learning in an educational community by making each of us, "an object of critical review and evaluation of the members of that community; and members of that community beginning to use, build upon and develop those acts of mind and creation" (Kelchtermans, 2009, p. 258).

More specifically to technology, UNESCO (2012) cites the need for improvement to both teacher quality and quantity, and discusses the use of mobile technologies to reach greater numbers of students, especially in developing areas. Various government Education departments are introducing a wider range of computer studies and electronic tools into schools (Department for Education, 2015; Nova Scotia Department of Education and Early Childhood, 2015).

The tools available for creating teaching and learning portfolios allow educators to reach wide audiences and support a larger community. For online and distance educators, teaching portfolios allow us to reach education community members around the world and to let them share in our work.

Bias of the Study

The personal sphere of the portfolio approach is heavily dependent on an autoethnographic review of the author's work. Such a review brings forth the issue of bias in the work and the selection of items based on an individual interpretation of what was important. However, the extensive peer-debriefing and such aspects as the quantity of hits on posts provide a level of rigor and help to mitigate the reviewer bias.

Future Research Directions

A natural progression of research into a portfolio process could involve the social nature of the portfolio and the concept of the community echo. When questioned about what type of profile they felt they were presenting to the world, many practitioners responded that they had not given much thought to their overall identity. This factor has been noted in previous studies (Leslie & Murphy, 2008) which discussed the reactions of various students to the knowledge that others were actually looking at their work. The community echo of unsolicited feedback, or that from unexpected sources is highly motivating.

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