The Use of Visual Images in Building Professional Self Identities

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ePortfolios are recognized as a pedagogical process that facilitates and benefits the development of professional practice and critical thinking, curriculum, and assessment for Higher Education academic teachers. Effective personalized introductions to ePortfolios engage with the reader by sharing narratives and personal perspectives that demonstrate reflective thinking. This article describes a professional development symposium workshop in which a hybrid process explored the visualizing of professional selves. It built on a previous professional development session in which creators of ePortfolios were asked to find an image used as a metaphor or symbol explaining a philosophy of professional practice. The process described here is an amalgamation of techniques currently used in separate undergraduate degree programs by each author and adapted to demonstrate a way to think about the self as a professional and was planned by the authors after conducting a year-long series of webinars on ePortfolio professional development. The images created by the symposium participants and their supporting statements demonstrate that explanations of a sense of professional self were enhanced by the ePortfolio introduction, narrative writing, and professional philosophy to engage an audience effectively. Application of this process allows visual images, whether literal, metaphoric, or symbolic, to provide a means for academics as well as post- and undergraduate students to present and explain their professional selves to an audience.

Background

Academic teachers in Higher Education are expected to create opportunities for their students to engage in learning that relates to real world experiences by providing authentic learning environments that include rich learning and engagement in higher order thinking skills. In many cases, students adapt to a new pedagogic practice quickly if it is integrated purposefully into curriculum and relates to real world experiences. As students become pre-service and early career professionals, the use of a portfolio enables them to present themselves to prospective employers and peers in a more individual and personal manner.

As a pedagogic tool through which students can use authentic evidence to document their achievements and skills, ePortfolio is acknowledged as having more than one purpose or use (Snider & McCarthy, 2012; Stefani, Mason, & Pegler, 2007). ePortfolios are a creative application of educational practice to support and benefit learning (Jafari & Kaufman, 2006); for many educators, the ePortfolio as a pedagogical tool provides a platform for teaching delivery, course management, and personal development as well as for assessment.

Research has shown that ePortfolio development encourages students' sense of self through a process of skills-uptake such as organization; collecting and classifying of evidence; utilization of tools; reflection on and in discipline specific knowledge, learning, and tasks; and higher order thinking such as synthesis and evaluation of learning (Chau & Cheng, 2010; Rowley & Munday, 2014). This article describes a professional learning workshop process that was presented at a national symposium and derived from a curriculum feature based on Ryan and Deci's (2000) self-determination theory and Lawrence's (2006) ideas about self-concept, which encapsulates the strength of ePortfolio narrative around students' thinking about their ideal selves as future professional practitioners.

We have, as active academic teachers, designed ePortfolio curricula that have been engineered into the degree programs of our respective universities. The outcomes of ePortfolio creation in these degree programs have been interpreted through the lens of a "sense of-self" model created from the superimposition of the self-determination continuum proposed by Ryan and Deci (2000) and Lawrence's (2006) ideas about self-esteem. Previous research concluded that immersion in the creative process and the reflective practice of constructing a visual image produced a strong sense of self with regard to preparing students for a future profession as teachers, musicians, medics, scientists, etc. (Rowley & Munday, 2014). This article also draws on the findings of one-year research project involving webinars that we managed and presented as professional development for academic teachers and curriculum designers who were working (or wanted to work) with ePortfolio for students at Australian higher education institutions. The one-year project, titled Strengthening IT Assisted Teaching: ePortfolio Use for Teaching Staff in Higher Education (Polly, Rowley & Munday, 2016), consisted of making a general call for webinar attendance to members of four partnering universities along with an advertisement to the national ePortfolio Australia website and the Google PebbleGroup. We conducted and recorded a series of webinars, then placed them on the ePortfolioAssist.com.au website for public access. Workshops were conducted at each of the university venues so that those present could have have a face-to-face discussion on the webinar topic.

The webinar program directly affected the professional development described in this article, which sought to analyze the multi-layered relationships provided by makers and viewers of ePortfolios, and one specific aspect was to investigate the potential for broader uptake through the use and inclusion of a visual image. The results from all of the professional development indicated that in different discipline areas a range of factors influence academic teachers' preparation of reflective students, through the use of the ePortfolio. This understanding may signal the need for individual and tailored approaches (depending on discipline and cohort group) to ensure that the symbolic nature of the visual image enables a broader understanding of self.

This aim of this article, therefore, is to argue that visual images help people to discuss and explore future professional traits. Educators who are charged with the responsibility of ensuring students are able to use the graduate attributes for an active reflection of their studies and knowledge may see this discussion as a possible pivot point in professional learning for the training of future professionals and the industries in which they will seek to work. The outcomes of the webinar and symposium professional development showed that ePortfolios, through their reliance on student choices, decision making, production of an individual's profile, and potential for contribution to identity construction, can be seen as a valuable tool for developing the individual's sense of self. After reviewing the pertinent literature, we have described the process undertaken in the symposium workshops, and in the Discussion section, then linked these outcomes to the outcomes of student ePortfolios in each university curriculum.

Literature Review

The use of ePortfolios as a digital space has grown exponentially with the advent of more sophisticated online platforms that use and assemble a variety of file formats. These platforms make it increasingly possible for academic students and teachers, as well as those in the professions, to present their understanding and accomplishments within a particular field in a more engaging way to different audiences. The improvement in technologies available for ePortfolios has led to research into curriculum design and pedagogy that gives owners of ePortfolios the advantage of demonstrating and explaining their learning (Kennedy & Shirley, 2011; Johnsen, 2012).

The flexibility of the online space allows personalized learning to be more dominant in higher education, with student-centred curriculum enabling constructivist approaches. Creators of ePortfolios are being asked to keep in mind the audience who will engage with their collections of artifacts and write convincing narratives to interest specific viewers (Cameron, Simpson, Warren, Begg, & Cumming, 2008); therefore, the process of curating evidence also requires deep reflective thought and encourages the ePortfolio authors/owners to think about ways of presenting themselves.

In the research, there have been a variety of approaches to presenting a professional self through ePortfolios that have been noted. In many cases, the ePortfolio provides a vehicle for presenting evidence of synthesis of theory and practice in specific disciplines and an opportunity to provide a self-appraisal in regard to industry professional standards (Gallagher & Poklop, 2014; Lewis & Gerbic, 2012). Hulme and Hughes (2006) recommended "bringing the self" into discussions of professional practice and the use of "patchwork text" to represent professional development (p. 193). In this case, "patchwork" refers to texts that are linked to illustrate a theme or set of perspectives, which the ePortfolio creators use in "fashioning or fabricating their *own* narrative of their personal and professional development—'my story'" (Hulme & Hughes, 2006, p. 196). Gwozdek, Springfield, and Kerschbaum (2013) discussed the self as a key aspect of professional development, saying that self-assessment through self-reflection can be characterized by self-awareness of personal value, responsibility, and contribution, where a purpose for an ePortfolio can be career self-presentation. Going beyond self-representation, self-reflection is discussed by a number of authors, including Porto and Walti (2010), who emphasized that the use of ePortfolios allows "a wide audience to look into learners' past experiences, self-image, personal and societal attitudes and values, as well as current life circumstances" (p. 227).

In this way, the literature references language that was used in a metaphorical way to support and scaffold the ePortfolio creator to write a narrative; however, the actual use of images, other than personal identifying images, is not common. Images are traditionally included in an individual's ePortfolio to illustrate points being made in a narrative, or as the provision of evidence as documentary artefacts; although Gallagher and Poklop (2014) reported that there is mixed success in meaningful links between images and text in many published ePortfolios.

There is research that explores the use of visual images and metaphors in identity building (Bailey & Van Harken, 2014; Dowling, 2011), and Cheryl Hunt (2001) reminds us that "metaphors provide a particularly useful way of seeing the familiar differently" (p. 276). The use of metaphor in the language employed in ePortfolios has been researched with the recognition that metaphors are an integral part of language and are an indication of deep reflection as

Figure 1
"Sense of Self" Model
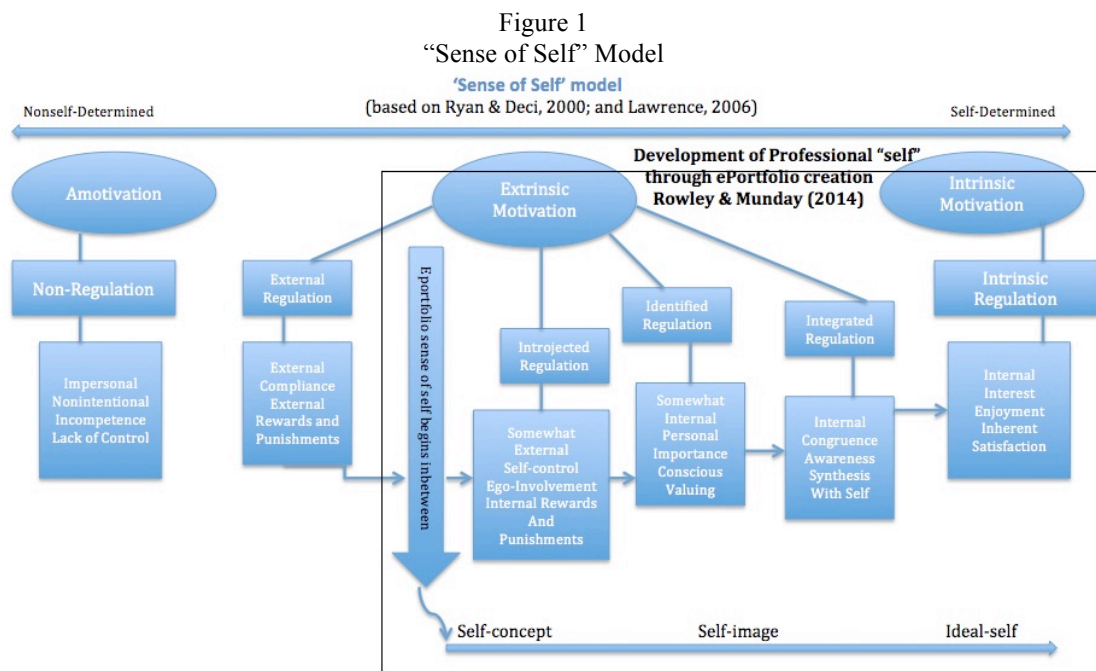
Note. This "sense of self" model was created by synthesizing a table demonstrating self-determination theory (Ryan & Deci, 2000) and Lawrence's ideas about self-concept (2006). We have noted that students producing ePortfolios embedded in higher education degree programs tend to move through the descriptors in the bounded rectangle, from extrinsic motivation to intrinsic motivation.

learners link ideas and evaluate the learning process (Brandes & Boskic, 2008). Some authors have posited that the metaphor of *story* is now being highlighted as a new way to look at ePortfolio assessment, instead of the traditional series of checklists (Finger & Jamieson-Proctor, 2009, p. 76). This progression of creators of ePortfolios to see themselves through narrative and metaphor can be regarded as the progression from a self-image to an ideal or professional self and can be enhanced by thoughtful and purposeful pedagogy (Rowley & Munday, 2014).

The overlay of two models, one illustrating self-determination theory (Ryan & Deci, 2000) and the other the model of ideal self (Lawrence, 2006) may be synthesized to create a "sense of self" model (Figure 1), acknowledges the importance of the creators' sense of self in ePortfolio creation, and suggests why ePortfolio curriculum design is important (Rowley & Munday, 2014).

The evolution of technology and more flexible online platforms have enabled creators of ePortfolios to use a wider variety of file types within more easily created versions of ePortfolios for different audiences. The ability to produce an aesthetically pleasing ePortfolio product means that we, as educators, need to provide structure to include more meaningful images and visual materials to enhance and emphasize the narrative of self being presented.

Method

This section discusses what we did in the 2014 and 2015 National Symposium Professional Learning Workshops. We implemented curriculum using metaphor and symbolism in regard to students' senses of self in their academic teaching with ePortfolios in undergraduate university degree programs and collectively recognized the impact this process has in enriching the student reflections regarding possible future and professional selves. This provided the foundation for developing an initial professional learning workshop with other academic teachers and curriculum designers in 2014 and was trialled by two of the authors at the national symposium ePortfolios Australia in Melbourne, Australia in September and October, 2014, the outcomes of which provided the platform for future development of the use of metaphor in ePortfolio practice (Munday & Rowley, 2014). The aim of the 2014 workshop was to develop participants' knowledge of how students might apply the skills developed through ePortfolio creation. The workshop leaders adapted and simplified processes each had embedded in their undergraduate curriculum. Participants were encouraged to think about the literal, metaphoric, or symbolic meaning of several images provided in the 2014 workshop. They were then asked to think about and note the qualities of their ideal teachers or mentors, and discuss these qualities. The discussion was followed by consideration of a visual

Figure 2
Photograph by Jennifer Rowley. The image was chosen by a 2014 national symposium workshop attendee to illustrate the metaphor of "pulling back the curtain to reveal the truth," an attribute of a good teacher from the participant's past.

representation of the noted qualities, and finally the participants were invited to seek an image from a website archive of National Geographic photographs, which allows use of its images with acknowledgment (National Geographic, 2017). The use of the National Geographic website meant that all participants could easily view a collection of a variety of photographic images from different cultures, locations, and natural sites that could trigger an idea of meaning or story suiting their personal reflections about mentors and teachers. The workshop activity then enabled participants to discuss the image as a vehicle for deeper reflection regarding their sense of self and how these understandings translated to themselves as professional educators and designers of learning.

Another workshop was designed for implementation in 2015 to extend the previous workshop outcomes and was centered on recognition and development of professional identity. The workshop facilitators (who are the authors of this article) began by asking workshop participants at the national symposium ePortfolios Australia in Perth, Australia from September to October, 2015 to consider and recognize their sense of professional identity instigated by a series of personal photographs (Rowley, Munday & Polly, 2015). Using items they had brought to the workshop, the participants, who were peer academic teachers and curriculum designers, were asked to take a photograph, using their smartphones, of something that was literal, metaphorical, or symbolic and that represents a facet of themselves. They were asked to review this photograph and follow up by taking a second photograph of the item from another angle. Finally, participants were asked to take a third photograph by standing up and photographing the item from a wider perspective. This allowed the participants to experience a spatial separation from themselves as

Figure 3
Photograph by Mark Henderson, "My Object"

Note. An example of one of the first in a series of three photographs that 2015 national symposium workshop participants took of a personal object they were able to say "said" something about themselves.

subjects and to consider other aspects of how they represent themselves physically and professionally, which was then reflected upon as part of their professional selves. After a discussion period, the participants were asked to write three statements about the three photographs they had taken. This reflective process gave them an opportunity to start thinking about aspects of their identity and allowed them to discuss and share in an impromptu manner. Examples of the photographs and reflections were then shared with the entire group, after which the facilitators presented the processes of developing professional identities in each of their undergraduate degree programs using the "sense of self" model.

Results: Examples of Workshop Participants' Work

In the 2014 national workshop, the participants engaged in discussion about the qualities of teachers or mentors who had influenced and inspired them in regard to their current professions. Qualities discussed and shared were mainly centered on recognition of ability and talent; understanding of the individual's suitability for a profession; and being a good listener, being a good counsellor, and fostering character and individuality. Figure 2 shows an example of a metaphor, "pull back the curtain to reveal the truth," for an attribute of a mentor teacher who brought out the

hidden talents of those she taught. The participants in the workshop overwhelmingly agreed that they were able to discuss their positive professional attributes more easily through the use of images, whether literal, metaphoric, or symbolic.

The 2015 symposium workshop extended the discussion around professional self and the participants' use of images to facilitate that reflection on self-identity. Rather than asking participants to find an image on a website, they were asked to take a photograph, using a smartphone, of a personal belonging they had brought to the workshop, and then asked to write a sentence about how the object said something about them professionally. Examples of objects that were chosen for photographing were: a diary, a pen, a notebook, and a coffee mug. Examples of explanations for the choice of object ranged from a physical description of the object to explaining how it had a similarity to the person's character or actions. For example, one participant noted, "this diary represents me as a professional as I like to help academics add a little bit of glitter to online teaching." Explanations also discussed how the object might appear to be ordinary, but was not. Figure 3 shows an example of one of the first photos taken by a symposium workshop participant, who wrote, "This is my pen—a perfectly ordinary looking device on the surface, BUT it is also a recorder device that combines old and new

Figure 4
Photograph by Pippa Nelligan, "From the Bottom Up"
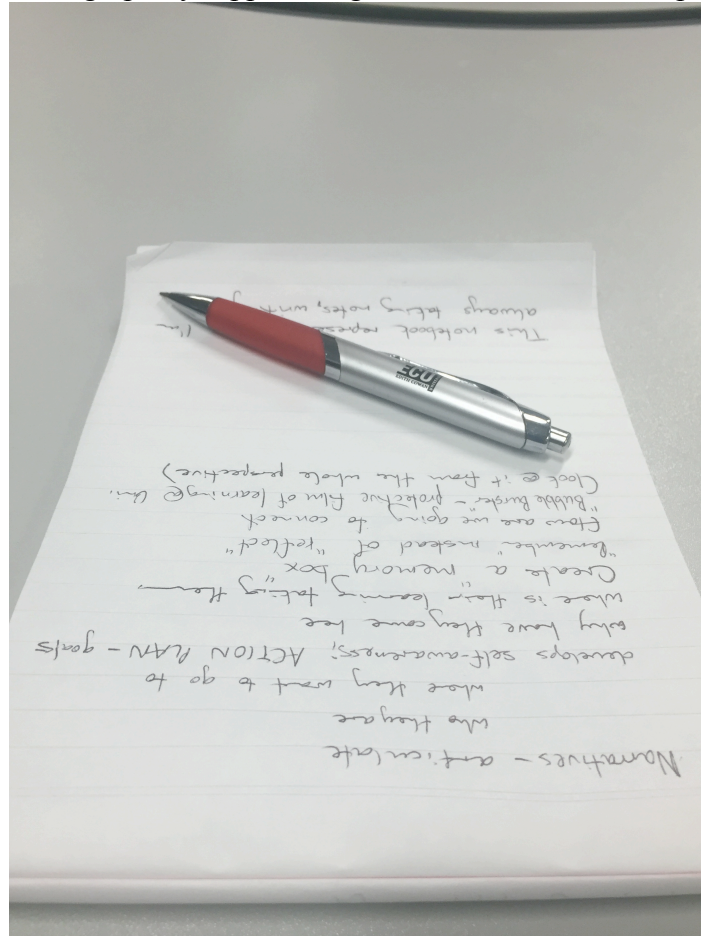
Note. An example of the second photograph taken in a series of three at the 2015 symposium professional development. The participants were first asked to take a photograph using a smartphone of a personal object that says something about them, followed by a second photograph of the same object from a different angle.

technology." Another respondent referred to the item being a symbol for current professional life, in which the person "need[s] a lot of coffee to work long hours . . . and constantly feel[s] I have to keep up to date."

The second photograph that participants were asked to take was of the same object, but from another angle. Again, they were to write a sentence about how this image could relate to their professional selves. The responses tended to be in relation to the angle the photographer had decided to use—the angle became a metaphor for themselves in a professional vocation. Figure 4 shows an example of a second photograph taken by a 2015 symposium workshop participant, who described the image as, "Picture from the bottom as I like to help underpin teaching from the bottom up with supporting digital technologies."

Finally, when participants were asked to stand up and take a photograph of the same object from a wider angle and then consider what this image might say about them professionally, the impact of the image changed. Responses in this final category tended to emphasize the use of metaphor or symbol to represent the participants' professional attributes. Figure 5 shows an example of a third image taken by a participant in the 2015 symposium workshop, who explained that when the object was photographed "from a distance, I can no longer read the words on the diary . . . as with good teaching the devil is in the detail." Another said, "It is a symbolic device that interacts with everyday technology and combines the old and new to help me record my ideas and thoughts in traditional ways and store them instantly electronically." Another participant

Figure 5
Photograph by Jacqueline Patten, "Taken From a Distance"

Note. This is an example of the third photograph taken in a series of three by a 2015 symposium workshop participant. The participants were photographing the same objects from different perspectives and relating it to their "professional selves."

noted, "The wider perspective shows how I prefer to learn—in groups, through discussion and the sharing of ideas. Ideas are more likely to stay with me if I have discussed them with someone."

The images created by the participants and their supporting statements demonstrate that explanations of a sense of professional self were enhanced, and that they were able to engage effectively in discussion with their peers around narratives and professional philosophies through the use of the images. The workshop outcomes led to a description of the deeper parallel processes in the embedded design and discussion of professional and personal selves through ePortfolio design and creation in the facilitators' respective undergraduate degree programs.

Application of the Method

In this section, we present the higher education degree programs and pedagogy presented in the 2015 national symposium workshops to illustrate embedded ePortfolios.

Medical Science Student Perspective

Students undertaking a third year science course, Molecular Basis of Inflammation and Infection (PATH3205), as part of the Pathology specialization within the Medical Science degree program at the University of New South Wales (UNSW) Australia, were asked to create an ePortfolio with WordPress. Use of WordPress as an ePortfolio blog facilitated and supported self-directed learning and reflective practice. As part of the self-directed learning process, students posted images of disease that reflected their view of pathology. These images not only appealed to the students in terms of their understanding and

interpretation of content matter, but also suggested a professional self that they could identify with. An interesting aspect of this process is the self-directed journey for students starting to build their professional identity even as undergraduates. Science students often engage well with content-specific knowledge, a key requirement of learning Pathology. However, as a key aspect of developing skills in research practice within the Pathology discipline, students started to delve deeper into what these new skills meant to their professional development, and ultimately, identity as medical scientists (Polly et al, 2015).

Teacher Education Student Perspective

As students enter the Bachelor of Education, Early Childhood and Primary degree program at Charles Sturt University, they begin their ePortfolio with a task that requires them to find or create images of themselves as future educators and then to discuss the images; the images may be literal, metaphoric, or symbolic. Throughout the degree program, the students (i.e., pre-service teachers) continue with their ePortfolios through various processes of assessment, development, reflection, and showcasing (Stefani et al., 2007). In their final year, the pre-service teachers are asked again to find or create images to reflect pending professional selves. The pre-professional students give this activity much thought, and contrasts are made to the initial images discussed several years earlier, with marked changes in outlook and learning. Figure 6 shows an example of a fourth-year image prior to the final professional practicum and graduation. The following pre-service teacher considered deeply how she could depict in an image the multitude of feelings and ideas to explain her individual situation in regard to learning and her future:

> The image . . . represents myself on my educational journey. The bottom of the image where I am lying represents my four years of university, that I am looking back on. The road ahead represents my future career, a long road into unknown territory. (Charles Sturt University student, 2015)

The image facilitated further discussion regarding the personal history of the student and the particular qualities she recognized with regard to positive professional attributes; it also provided an opportunity for discussion of a specific example of expertise whilst on a past professional practicum, which had been a unique experience that she felt made her more valuable as a future teacher. Within a showcase ePortfolio, this student was able to make a very strong statement to a prospective employer regarding her positive attributes and her accumulated expertise:

> I believe I am an intellectually capable, culturally sensitive, compassionate, and contemporary teacher. I am a teacher who strongly values communities, a team player, and I understand the contribution I can make to add to the cultural capital of communities beyond direct teaching. (Charles Sturt University student, 2015)

As Bailey and Van Harken (2014) concluded, this pre-service teacher "was making important connections that were generative and reflective. In doing so, she took a giant step forward in her understanding of what good teaching should be as a result of her own effective data analysis" (p. 256).

Music Teacher Education Student Perspective

Musicians who are preparing to be music teachers in the Bachelor of Music, Music Education program at the University of Sydney were introduced to a student-created ePortfolio, over a four-year period, through a research-funded project by the University of Sydney Teaching Improvement and Equipment Scheme grant. The project aimed specifically to embed a range of ePortfolio tasks across the four-year degree program in an incremental manner that ensured longevity (Rowley, 2011). The first portfolio task for students was to create a metaphor for teaching whilst undertaking the introduction to teaching course—Fundamentals of Music Teaching and Learning (MUED 1008). This entailed working as a group and creating an electronic poster that was then defended in an assessed seminar presentation. It was a challenging task, engaging students in peer learning, information technology (IT) manipulation, and self-reflection as they had to design and create the metaphor into an electronic poster. Figure 7 shows one example of the graphical metaphor that a student perceived as a metaphor for music teaching. The old doorway symbolizes for this student a need to enter and exit throughout a teaching career and to be aware that past, present, and new pathways can contribute to future development as career professionals. He wrote, "We are like keys opening the door for students to learn" (University of Sydney student, 2014).

For many students, the task of graphically capturing their metaphors for teaching challenged their concept of future possible selves, and the electronic posters produced reactions to their learning to be music teachers based on how to present themselves as music educators, both in schools and in other settings (e.g., private studios, community groups, ensembles). Students agreed that philosophical statements of their beliefs in music education were an essential component of an ePortfolio, in addition to the metaphor for teaching music. As one student commented, "[You

Figure 6
Photograph by Stephanie Clark

Note. Image provided in a final year ePortfolio using metaphor and symbols to illustrate readiness for the profession of teaching.

Figure 7
Image from a Student ePortfolio

Note. This image symbolizes a need to enter and exit learning, as a metaphor within a future professional career.

Figure 8
Poster From a Student ePortfolio

Note. This poster, from a student ePortfolio, shows the complex thinking of this particular student in regard to where and how teaching is a metaphor for navigating a complex set of rules such as learning to drive a car.

could include] lots of different things that show your diversity." Figure 8 shows the complex thinking of this particular student in regard to where and how teaching is a metaphor for navigating a complex set of rules, such as learning to drive a car.

In relation to this assessment that was peer reviewed as well as assessed by staff, students debated whether staff or students should assess ePortfolios. Finally, it was agreed that peers best reviewed this metaphor task and that this would work in everyone's favor: One student commented, "Everyone can have a look at everyone else's, and that's what people will be doing . . . looking at it . . . and that way you get other ideas" (University of Sydney student, 2014).

Overall, music education students saw the functionality of an ePortfolio to present multi-faceted representations of themselves through a range of digital media (e.g., electronic posters, audio files, documents, images, diagrams) in the one electronic location as advantageous. They saw this as an outcome of, and supportive of, the increasing technologizing of education in general and of music education specifically, noting that a good ePortfolio could show a person's technological skills to advantage.

With regard to the "sense of self" model depicted in Figure 1 (Rowley & Munday, 2014), the pre-professional students beginning their academic studies are extrinsically motivated to work on their ePortfolios; however, the personal nature of the task aligns with their self-concepts and assists with enhancing their self-images. In their final years, their motivations have become intrinsic as they move closer to professional practices and their views of themselves as ideal-selves.

The academic teachers and curriculum designers who were symposium participants in the 2015 national symposium professional learning workshop were intrinsically motivated to attend, since they had chosen from a number of alternative events being held at the same time. However, in regard to the "sense of self" model, they were extrinsically required to undertake the activity, which did ask them to consider their self-concepts in relation to images and their professional work. Through the resulting discussion of the created images and their relationships through metaphor, the symposium workshop participants rapidly worked their way through the model in a self-determined manner.

Conclusion

The use of visual images in a portfolio can be regarded as a complementary strategy to the suite of strategies academic teachers are currently using for developing a student's sense of self. Similar positive outcomes to those demonstrated and discussed in this article can be achieved through explicit discussions that academics can have to adjust their curriculum and to utilize the metaphoric or literal images with their students within other processes they undertake with ePortfolio practice. As students look to their future selves through the lens of pre-professionals, they are more likely to visualize themselves as competent in a range of skills. The outcomes of the national symposium workshop processes and the embedded design in the three example undergraduate degrees show the need to continue the dialogue with academic colleagues to encourage reflection on the portfolio process rather than getting caught in the void of technology. Developing our degree students' digital literacies is in fact developing their literacy skills, which contributes to a holistic view of themselves as practitioners. In a way, as degree students see themselves more clearly as professionals (e.g., nurses, teachers, scientists, engineers), they see value in their studies and start to engage in higher levels of thinking

with subject matter—it becomes purposeful. The authors have noted that students' reflection on themselves as competent pre-professionals in their disciplines within the ePortfolio achieves a level of the graduate attributes and learning outcomes that universities and higher education strive to achieve over the journey of a student's degree program.

Our previous research study, which included the webinar series, and the national symposium workshops were intentionally provocative in contexts and applications, and demonstrated uses of the visual image for promoting a sense of self. The processes of ePortfolio for a varied and diverse range of purposes in teaching and learning across all disciplines allows for greater interaction with subject specific knowledge and for engaging in higher order thinking processes. Many of the uses for the visual image described in this article replicate the viabilities of ePortfolios for submission and assessment of students' work and encourage collaborative peer interaction. It is a key point that for success in the development of the professional self that pre-professional students, as well as academics, need to understand self-promotion in professional settings. In the journey for any professional towards accreditation, the ePortfolio can be seen as a useful process for archiving and curating an individual's learning as well as promoting and showcasing high quality achievements. The authors see the portfolio as a tool for a longitudinal representation of the outcomes of an academic program, as an influence on curriculum design and renewal, and as a method for promoting reflective practice. These are all key strategies for academics as they navigate the journey of a student's development as a professional practitioner, and ePortfolio creation through the use of a visual image can encourage this self-realization and reflection.

References

Bailey, N., & Van Harken, E. (2014). Visual images as tools of teacher inquiry. *Journal of Teacher Education, 65*(3), 241-260. doi:10.1177/0022487113519130

Brandes, G., & Boskic, N. (2008). ePortfolios: From description to analysis. *International Review of Research in Open and Distributed Learning,* 9(2). Retrieved from http://www.irrodl.org/index.php/irrodl/article/view/502/1041

Cameron, H., Simpson, K., Warren, P., Begg, M., & Cumming, A. (2008). ePortfolios in Edinburgh Medical School: Their intended purposes and future directions. A review of curriculum development through educational discourses and an historical perspective. *Proceedings of ePortfolios, Identity And Personalised Learning in Healthcare Education, United Kingdom*,

Special Report 10, 83-90. Retrieved from https://www.heacademy.ac.uk/system/files/105_eportfolios_lr.pdf

Chau, J., & Cheng, G. (2010). Towards understanding the potential of e-portfolios for independent learning: A qualitative study. *Australasian Journal of Educational Technology, 26*(7), 932-950. Retrieved from https://ajet.org.au/index.php/AJET/article/view/1026

Dowling, S. (2011). *Constructing identity identity construction* (Unpublished master's thesis). Georgia State University, Atlanta, GA. Retrieved from http://scholarworks.gsu.edu/art_design_theses/88

Finger, G., & Jamieson-Proctor, R. (2009). Assessment issues and new technologies: ePortfolio possibilities. In C. Wyatt-Smith & J. Cumming (Eds.), *Educational assessment in the 21st century: Connecting theory and practice* (pp. 63-81). New York, NY: Springer.

Gallagher, C., & Poklop, L. (2014). ePortfolios and audience: Teaching a critical twenty-first century skill. *International Journal of ePortfolio, 4*(1), 7-20. Retrieved from http://www.theijep.com/pdf/ijep126.pdf

Gwozdek, A. E., Springfield, E. C., & Kerschbaum, W. E. (2013). ePortfolio: Developing a catalyst for critical self-assessment and evaluation of learning outcomes. *Journal of Allied Health, 42*(1), e11-7. Retrieved from http://search.proquest.com/docview/1443469040?accountid=10344

Hulme, M., & Hughes, J. (2006). Patchwork e-dialogues in the professional development of new teachers. In J. O'Donoghue (Ed.), *Technology supported learning and teaching: A staff perspective* (pp. 210-223). Hershey, PA: IGI Global. doi:10.4018/978-1-59140-962-5.ch013

Hunt, C. (2001). Shifting shadows: Metaphors and maps for facilitating reflective practice. *Reflective Practice, 2*(3), 275-287, doi:10.1080/14623940120103022

Jafari, A., & Kaufman, C. (Eds.). (2006). *Handbook of research on ePortfolios*. Hershey, PA: Idea Reference Group.

Johnsen, H. (2012). Making learning visible with ePortfolios: Coupling the right pedagogy with the right technology. *International Journal of ePortfolio, 2*(2), 139-148. Retrieved from http://www.theijep.com/pdf/IJEP84.pdf

Kennedy, D., & Shirley, C. (2011). Innovative curriculum design: Using ePortfolios to change practice and process. In S. Barton, J. Hedberg, & K. Suzuki (Eds.), *Proceedings of Global Learn 2011* (pp. 409-416). Retrieved from https://www.learntechlib.org/p/37204

Lawrence, D. (2006). *Enhancing self-esteem in the classroom*. London, UK: Sage.

Lewis, L., & Gerbic, P. (2012). Using ePortfolio to address professional standards in a teacher

education programme: The student voice. *Journal of Teaching and Learning for Graduate Employability,* *3*(1), 17-25. doi:10.21153/jtlge2012vol3no1art555

Munday, J., & Rowley, J. (2014). Reflective thinking in ePortfolios. *ePortfolio Australia Forum & workshops – Moving Forward*, Melbourne. Victoria: ePortfolios Australia. (October 2). Retrieved from https://eportfoliosaustralia.files.wordpress.com/2014/08/eportfolioforum_2014_program_a4print_fin_20140825.pdf

National Geographic. (2017). *Photography.* Retrieved from http://photography.nationalgeographic.com/photography/

Polly, P., Cox, J., Coleman, K., Yang, J., Jones, N., & Thai, T. (2015). Creative teaching, learning, and assessment in medical science: ePortfolios to support skills development in scientists beyond just knowing their own discipline content. In K. Coleman & A. Flood (Eds.), *Capturing creativity through creative teaching* (pp. 168-182). Champagne, IL: Common Ground.

Polly, P., Rowley, J., & Munday, J. (2016, August). *Cross-institutional ePortfolio implementation, use and professional development for teaching staff in higher education. Paper Presented at the annual meeting of the Association for Authentic Experiential and Evidenced-Based Learning annual conferernce – beyond the box: liberating pedagogical creativity with eportfolios*. Boston, MA. Retrieved from http://www.aaeebl.org/page/2016_program

Porto, S., & Walti, C. (2010). Lifelong learning links in the ePortfolio. In J. Liebowitz & M. Frank (Eds.), *Knowledge management and e-learning* (pp. 219-252). New York, NY: CRC Press.

Rowley, J. (2011). Technology, innovation and student learning: ePortfolios for music education. In C. Nygaard, N. Courtney, & C. Holtham (Eds.), *Beyond transmission: Innovations in university teaching* (pp. 45-62). Faringdon, UK: Libri.

Rowley, J., & Munday, J. (2014). A sense of self through reflective thinking in ePortfolios. *International Journal of Humanities Social Sciences and Education, 1*(7), 78-85. Retrieved from https://www.arcjournals.org/pdfs/ijhsse/v1-i7/9.pdf

Rowley, J., Munday, J., & Polly, P. (2015). *ePortfolio use and pedagogy to find your point of difference.* Retrieved from https://eportfoliosaustralia.files.wordpress.com/2015/09/eportfolioforum_2015_program_a4print_v5_20150925a.pdf

Ryan, R., & Deci, E. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68-78. doi:10.1037/0003-066X.55.1.68

Snider, E., & McCarthy, A. (2012). Self-representation and student identity: A case study of international student users of Sakai. *International Journal of ePortfolio, 2*(1), 99-111. Retrieved from http://www.theijep.com/pdf/IJEP56.pdf

Stefani, L., Mason, R., & Pegler, C. (2007). *The educational potential of e-portfolios.* London, UK: Routledge.

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