The potential of e-Portfolio – enhancing graduate employability in a professional program

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While professional courses have had a long association with work-integrated learning (WIL), issues around graduate employability, and insufficient interaction between university and industry learning and assessment, have led more recently to greater investment in WIL in the Higher Education sector (Goulter, 2007, Patrick et al., 2008). Guided by WIL principles of the Innovative Research Universities (2008), as well as notions of criticality in WIL (Billett, 2009) and hybrid spaces in teacher education (Zeichner, 2010), this paper explores the potential of an e-Portfolio to enhance graduate employability among pre-service teachers in a one-year professional program. The authors analyzed transcripts of interviews with key stakeholders — including Professional Experience Advisory Committee (PEAC) members, pre-service teachers, and program lecturers - as well as policy, curriculum, and course accreditation documents, and pre-service teacher work samples. Findings support the potential of the e-Portfolio as a learning, assessment, and employment tool - a platform to facilitate exploration, construction, presentation, and critique of evidence (Bloomfield, 2009) against the graduate professional standards (QCT, 2006). While findings point to the e-Portfolio as both product and process (Bloomfield), they also reveal the need to further consider its current articulation with issues of policy, pedagogy, and curriculum, as well as to engage more broadly with stakeholders to determine how to enhance inputs and outcomes (Oliver, 2010). (Asia-Pacific Journal of Cooperative Education, 2010, 11(3), 93-102)

Keywords: e-Portfolio, WIL, professional standards, graduate employability

INTRODUCTION

The one-year Graduate Diploma of Education (Years 1-9) at the Cairns Campus of James Cook University (JCU) exits graduate teachers for the early primary and middle school. The course is accredited with the Queensland College of Teachers (QCT), the body responsible for accrediting all teacher education courses, and registering teachers, within the state. Accreditation involves demonstration of how knowledge and practice, encapsulated in the graduate *Professional Standards for Queensland Teachers* (QCT, 2006), are developed and assessed across both university and professional experience components of teacher education courses. Our Graduate Diploma of Education comprises academic units in professional and curriculum studies, as well professional experiences undertaken at partner schools.

In terms of pre-service teacher education courses, Zeichner (2010) highlighted the need for hybrid spaces "where different aspects of expertise that exist in schools are brought in and coexist on a more equal plane with academic knowledge" (p. 95). Rather than simply a valuing of respective knowledge and expertise, hybrid spaces result from the purposeful creation of activities and experiences where academic and professional knowledge are developed, integrated, and critiqued. An e-Portfolio was selected as the key device by which to integrate academic and professional experiences within the Graduate Diploma of Education, in light of contemporary developments in Work Integrated Learning (WIL) (IRU, 2008; JCU, 2008; Patrick et al., 2008; Billett, 2009); authentic assessment (Herrington, Reeves, Oliver & Woo, 2004; Herrington, Reeves & Oliver, 2007); and e-Assessment (Klenowski, Askew & Carnell, 2006; Penny & Kinslow, 2006; Boyle & Hutchinson, 2009; Crisp, 2008). An

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additional advantage of the e-Portfolio is its application in the support of graduate employability.

The embedding of the e-Portfolio within our Graduate Diploma of Education course was guided by the following principles of best practice in WIL, as outlined by the Innovative Research Universities (IRU, 2008, pp. 1-4):

- policy (i.e. the positioning of WIL in higher education);
- pedagogy and curriculum issues (i.e. embedding WIL in the curriculum and assessing WIL); and
- partnerships (i.e. engaging and informing WIL partners and managing relationships).

These principles frame our research, allowing exploration of learning, assessment, and graduate employability applications of the e-Portfolio.

METHODS

A small-scale qualitative study was undertaken to investigate the e-Portfolio as a tool for learning, assessment, and graduate employability, with the latter as the primary focus of this paper. This study is a pilot in the collection, analysis, and communication of emerging data and issues (see Dinan-Thompson, Hickey & Lasen, 2010). For this paper, three methods were used to collect data: document analysis, purposive sampling, and semi-structured interviews (Lankshear & Knobel, 2010). Documents that provided multiple perspectives on the embedding of the e-Portfolio within our program included subject outlines, QCT professional standards files and memos, Phase 1 and 2 QCT Accreditation Reports, and preservice teacher work samples.

Purposive sampling became necessary to target key participants in the study, namely preservice teachers enrolled in the Graduate Diploma of Education, members of the program's Professional Experience Advisory Committee (PEAC), as well as program lecturers. These key participants were able to provide data specific to the research interest. The aim of the semi-structured interview was to facilitate the participants in providing rich and complex perspectives on e-Portfolio interpretations. Researchers were able to pursue key themes, probe responses, and allow unforeseen information to emerge in the interview. Findings regarding e-Portfolio applications and, more broadly, processes involved in the creation of a hybrid space in our Graduate Diploma of Education, are presented within discussions of policy, pedagogy and curriculum, and partnerships.

POLICY

James Cook University (2008, para. 1) identifies WIL as a "priority issue". In its Academic Plan, the integration of WIL is identified as a key strategy for the enhancement of course quality. While drawing upon the definition of WIL as a "generic term used to describe a combination of formal learning and workplace experience integrated within higher education courses" (Precision Consultancy, 2007, cited in JCU, 2008, para. 3), JCU seeks to broaden the thinking around WIL to also include aspects of "career development and management, the embedding of graduate attributes within the curriculum subjects, and opportunities for engagement with the community" (JCU, 2008, para. 4). While the latter is applicable to our context, we were additionally required to attend to the QCT graduate professional standards and engagement with our industry partners when incorporating WIL in our Graduate Diploma of Education. In fact, we overtly privileged the professional

standards given the course's status as a professional program, as well as recognition that the JCU (2005–2010) graduate attributes (generic skills and graduate qualities) are largely embedded within the professional standards.

In Australia, Schools of Education have embedded WIL in their courses for a number of years (Patrick et al. 2008), usually in the form of professional experience (practicum in schools). In our Graduate Diploma of Education, pre-service teachers undertake 75 days of professional experience over the duration of their one-year course. Like their Bachelor of Education counterparts, Graduate Diploma pre-service teachers are to demonstrate attainment of all ten professional standards (see Figure 1) in their final professional experience in order to be deemed 'satisfactory'. However, our view was to create a space wherein academic and professional knowledge was brought together, developed, and critiqued (Zeichner, 2010) – a space that, importantly in a one-year professional course, promoted deep learning and graduate employability. So too, we needed to be able to utilize this space to make authentic assessments while still adhering to university assessment policy regarding format, timing, weighting, invigilation, and moderation processes (JCU, 2010). At the recent Phase 2 Accreditation of this professional course, the panel commended the course stating "it [was] clear that the Standards are core to the Graduate Diploma program" (QCT, 2010, p. 7).

With perhaps greatest resonance in our context, Billett (2009) defined WIL as "students learning from and integrating the contributions of experiences in educational and practice settings to develop the understandings, procedures and dispositions required for effective professional practice, including criticality" (p. v). Key here is the element of criticality. Central to the graduate professional standards is a commitment to reflective practice (see Figure 1), which involves pre-service teachers "reflecting critically on personal professional practice" and "using the professional standards to analyse professional strengths and weaknesses" (QCT, 2006, p. 12). An integral requirement of the e-Portfolio, as will be seen in the following section, is for pre-service teachers to critically engage with evidence emanating from university and professional experiences, for each of the professional standards, in order to enhance their understanding and practice, and ultimately, employability.

Professional Standards For Queensland Teachers

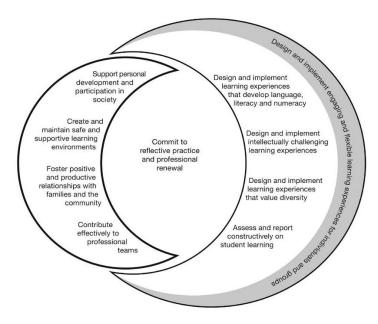


FIGURE 1: Queensland College of Teachers' Professional Standards (2006)

PEDAGOGY AND CURRICULUM ISSUES

e-Portfolios have the potential to bring together the usually separate classifications of learning portfolios, assessment portfolios, and employment portfolios (Penny & Kinslow, 2006). We reconsidered the traditional, paper-based professional portfolio within our yearlong professional studies component, focusing on the added potential of an e-Assessment task (Boyle & Hutchinson, 2009). The e-Portfolio created new possibilities of archiving evidence digitally, including authentic material such as a video of a lesson's tuning in or photographs of student work samples. In this way, learning is made visible through the digital capture of the "learner's authentic voice" (Barrett & Wilkerson, 2004). Emphasis in the professional standards (QCT, 2006, p. 5) on exiting digitally literate graduates provided further rationale for an e-Portfolio. Importantly, we were also interested in its portability for employment applications.

In our e-Portfolio task, pre-service teachers are required to select evidence to demonstrate an emerging understanding, practice repertoire, and teacher identity with reference to the ten professional standards. Given that we encourage them to select evidence from their professional experience, as well as their full suite of university assessment tasks, we systematically mapped the breadth and depth of coverage of the professional standards across the Graduate Diploma of Education course at the outset of the project. Subsequently, we refined subject emphases and assessment tasks to provide pre-service teachers with

multiple and sequenced opportunities to develop requisite knowledge and practice. Explicit references to relevant professional standards were made within subject outlines in the framing of weekly foci and assessment tasks and rubrics. As stated by the Phase 2 Accreditation Panel, "students have ample opportunity to demonstrate the Professional Standards, and this was especially clear in [pre-service teacher] work and assessment tasks" (QCT, 2010, p. 7). However, it is noteworthy that samples of e-Portfolios demonstrated selection of professional experience events and tasks to the outright exclusion of university assessment tasks.

To shift the emphasis from the collection of evidence to a focus on the analysis and integration of learning (Klenowski et al., 2006; Nash & Sacre, 2009), a define–describe–analyze–transform (DDAT) structure was devised for our e-Portfolio (Hickey, 2010). According to a lecturer in the program, the transform component of the DDAT structure demands that pre-service teachers reflect on their practice in light of relevant literature and theories, asking questions such as How can I use this experience to improve my teaching, to change my strategies, to rethink where I am going? A recent paper by the authors (Dinan-Thompson, Hickey & Lasen, 2010) communicated pre-service teachers' perceptions of the e-Portfolio as an effective tool for learning, planning for practice, and reflection. This resonates with Klenowski and colleagues' findings that a learning portfolio needs "to have an internal coherence, extend participants' learning rather than being a collection of unconnected thoughts," and be part of a broader curriculum wherein there are opportunities for participants "to explore their understanding of particular theories and concepts in their own professional contexts" (p. 277).

PARTNERSHIPS

Informing and engaging partners, as identified as a key principle of WIL (IRU, 2008), was an integral part of our teaching and research agenda, and occurred through lecturer planning days, PEAC meetings (involving representation from all key stakeholders), and meetings between the Graduate Diploma of Education Coordinator and school-based teacher educators at school placements. We were commended at the Phase 2 Accreditation for "the collaborative processes used by the university with stakeholders" (QCT, 2010, p. 9). Stakeholder interview data revealed further potential of the e-Porfolio in school-based professional experience and teacher employment settings.

One PEAC member thought that the e-Portfolio would have greater validity if, in the least instance, "the student shows the supervising teacher and the supervising teacher will counter sign to say that the student did participate in this type of activity and this is a true account of what actually happened." However, he saw this as "a trust issue" – in sharing their e-Portfolios, pre-service teachers "have to hand over something that they value, that is fairly personal, as it is a reflective process." However, according to another PEAC member, if shared with the school-based teacher educator, the e-Portfolio could make visible the gaps in the pre-service teacher's understanding or evidence base across the ten professional standards. This would inform collaborative planning, as he explained:

I had a Grad. Dip. student last semester and we had some discussions about what artefacts do you pick but that was the limit of the conversation. I certainly will be having conversations about what examples they are going to look at and how can we not engineer the situation, but put my student in the place to get what she needs.

In this capacity, the e-Portfolio could serve as a potential platform to promote "productive and respectful conversations that emphasise the negotiation of meaningful goals and shared understanding" (Smith & Lowrie, 2009, p. 170) between the pre-service teacher and the school-based teacher educator in the professional experience setting.

One PEAC member thought that the e-Portfolio could allow "those sort of substantial conversations around the artefacts and the processes" in the teacher employment interview, bringing to the fore the "reflective process that we don't normally get to see in an interview situation." Another PEAC member also saw potential for the e-Portfolio to facilitate deeper dialogue between employment interviewers and pre-service teachers. He pre-empted discussions about selection and quality of evidence in the interview setting:

I think the interesting discussion to have with them [pre-service teachers] would be about why they chose one particular example. If I was on the panel I'd say, 'Why did you pick that one and not something else?'

He felt that if pre-service teachers had engaged in critical evaluation of practice and sourcing of sound evidence then that would "come through in the way they handle the questions." He concluded that the e-Portfolio helps pre-service teachers "to organise themselves for that goal as well as talk about the nature of their work," identifying its facility to "organise a breadth of experiences into one document" as its "single best element." Thus, e-Portfolios, as articulated by Bloomfield (2009), work "in terms of process and product", providing a "medium through which representative evidence of the teaching self can be explored, constructed, revised, combined, presented, discussed and critiqued" (p. 151).

One PEAC member stated that, in the private education sector, the quality of evidence in the e-Portfolio may determine whether the pre-service teacher is even granted an employment interview. He said that:

...when we are looking at a whole range of graduates, that is where we start. It is all about the detail. Certainly, that gets you to the table.

Similarly, another member said that the e-Portfolio could "give you a feel for whether they [pre-service teachers] are worth interviewing" and that "it shows more than a letter." A third PEAC member concurred that "a job application and a CV are not overly transparent, whereas this does seem to have more depth to it."

Once in the interview, the ability to discuss one's practice using appropriate language and evidence was perceived by stakeholders to be paramount. A PEAC member recounted that he had recently interviewed graduates, two of whom he knew to be "good teachers but who couldn't articulate what made them good teachers." This PEAC member acknowledged that, in preparation for his own employment interview, he simply "rote learned the language of what to say." In contrast, he was "impressed with the depth of the thought processes and the engagement that the pre-service teachers have to have," as facilitated by the e-Portfolio task, "to understand rather than to just learn the standards." Another PEAC member, also recollecting her own interview, stated that even though there was a requirement to write to selection criteria:

It wasn't something that you had internalised and really had a good grip on before you went to the interview. It was something that you just had to suddenly do rather than something that you had progressively developed. This contrasted with the way in which pre-service teachers, who were part way through compiling their e-Portfolios, described their own preparedness. One pre-service teacher said that "we have worked through the standards and there is evidence there." She perceived that completion of the e-Portfolio:

...would really help to prepare me to address anything they might ask. Rather than draw a blank if they ask you something because it is a nervous situation, you say 'O.K. I've got this here'...something to point to...providing that is the scope of what they [the interviewers] delve into.

Another pre-service teacher also believed that undertaking the e-Portfolio task prepared her to answer questions more confidently in an interview situation because "I have the evidence and I have an understanding." She expressed uncertainty, though, as to what may be addressed in the teacher suitability rating interview conducted by the state employing authority, given that in a visit from Education Queensland staff, "they didn't actually mention the QCT standards." In fact, one PEAC member from the private education sector, after having seen a pre-service teacher presentation of the e-Portfolio, commented that:

I've made a note that I will bring back to them [members of his sector] the need to consider whether or not to start linking a question or two to the standards.

In summary, alongside affording pre-service teachers a language to discuss their own practice, as a result of 'internalisation' of the standards, and an evidence base to demonstrate achievement across the repertoire, stakeholders felt that the e-Portfolio could provide interviewers with an opportunity to ask deeper questions regarding selection and quality of evidence and, in the private sector, to filter applicants on these grounds before they even get "to the table." There was, however, uncertainty among pre-service teachers as to whether the professional standards would inform interview questions, given no reference to the standards in a visit from the state's employing authority. Feedback from a PEAC member in the private sector suggested that professional standards are not routinely referred to in their interviews. Despite some PEAC members conveying a lack of familiarity with the professional standards, all stakeholders perceived that critical reflection on practice and evidence in light of professional standards has the capacity to strongly position pre-service teachers for employment interviews.

VIEW FORWARD: DEEPENING POTENTIAL OF THE E-PORTFOLIO

While initially investing in the learning and assessment agenda of WIL, our research data has suggested a purposeful merging with graduate employability, and hence a further valuing of the e-Portfolio as process and product (Bloomfield, 2009). Strong endorsement of the graduate employment applications of the e-Portfolio from PEAC members and pre-service teachers points to the need for future engagement with teacher employing authorities and Human Resource personnel across sectors, with a view to establishing greater compatibility between the design of the e-Portfolio and current employment interview guidelines and processes. This may enhance the e-Portfolio not only as product for employment interviews but also for the purpose of course benchmarking. Input from a broad range of key stakeholders "[will] inform our reflections on the capabilities that count for early professional success and assist us to determine how we might enhance inputs and outcomes" (Oliver, 2010, p. 354).

Analysis of data generated in this small-scale study suggests alignment with aspects of Oliver's (2010) "360-degree approach to capability development for graduate employability" (p. 354). There may be potential to incorporate assessment of achievement of capabilities by school-based teacher educators, peers, and the pre-service teachers themselves (Oliver, 2010, p. 355). However, assessment by stakeholders beyond the university lecturer brings with it elements of trust and uninhibited reflection, and may only be achievable if formative in nature – for instance, to inform planning for professional experiences that specifically address gaps in knowledge and practice, as suggested by one PEAC interview participant.

Penny and Kinslow (2006) highlighted the potential for the e-Portfolio to serve learning, assessment, and employment purposes. Even though tensions may currently exist between purposes, and we will need to be able to clearly articulate purposes for stakeholders (Klenowski et al., 2006), data emanating from this pilot study suggests that it is difficult to see them as separate classifications if the requisite conceptual, procedural, and dispositional knowledges (Billett, 2009) are to be targeted for graduate employability. Indeed, core to the professional standards for Queensland teachers (see Figure 1) is a commitment to reflective practice. The define-describe-analyze-transform structure of our e-Portfolio was adopted to facilitate processes of deep learning and reflective practice. There may be need to review, however, the fragmentation of the QCT professional standards as ten separate collections of evidence, analyses, and transformative practices. This fragmentation may be hindering the development of pre-service teachers' criticality (Billett) and understanding of the complexity that is teacher's work (Yorke, 2010). For future consideration, too, is the ever-changing policy domain for teacher education, with new National Teacher Standards and Teacher Education Accreditation processes on the horizon (Australian Institute for Teaching and School Leadership, 2010).

Zeichner's (2010) notion of the hybrid space informed the embedding of the e-Portfolio in our Graduate Diploma of Education. A valuing of professional knowledge and experience, to the exclusion of university assessment tasks, was apparent in pre-service teachers' selection of evidence to demonstrate attainment of the professional standards for their e-Portfolios. What this implies is an under-valuing of university tasks and experiences, which may have been reinforced by school-based teacher educators and employing authorities. Clearly, there is need for deeper engagement with all stakeholders to make the hybrid space operate on an equal plane. Moreover, there is considerable latitude to collaboratively explore policy, pedagogy, and curriculum design dimensions of the e-Portfolio so as to extend its potential in terms of learning, assessment, and graduate employability.

REFERENCES

Australian Institute for Teaching and School Leadership. (2010). *National professional standards for teachers and Pre-service teacher education program accreditation*. Retrieved September 5, 2010 from www.aitsl.edu.au/ta/go

Barrett, H., & Wilkerson, J. (2004). Competing paradigms in electronic portfolio approaches: Choosing an electronic portfolio strategy that matches your conceptual framework. Paper presented at AERA Symposium, Setting an agenda for research on electronic portfolios: Past practices and new directions. Retrieved June 7, 2010 from http://electronicportfolios.org/systems/paradigms.html

Billett, S. (2009). *Developing agentic professionals through practice-based pedagogies*. Final Report for ALTC Associate Fellowship. Retrieved September 20, 2009 from http://www.altc.edu.au/resource-developing-agentic-professionals-griffith-2009

- Bloomfield, D. (2009). Using portfolios to communicate. In R. Ewing, T. Lowrie & J. Higgs (Eds), *Teaching and communicating: Rethinking professional experiences* (pp. 149–162). South Melbourne, Australia: Oxford University Press.
- Boyle, A., & Hutchinson, D. (2009). Sophisticated tasks in e-assessment: What are they and what are their benefits? *Assessment & Evaluation in Higher Education*, 34(3), 305-319.
- Crisp, G. (2008). Raising the profile of diagnostic, formative and summative e-assessments:

 Providing e-assessment design principles and disciplinary examples for higher education
 academic staff. Australian Learning and Teaching Council Associate Fellowship Report.
 Retrieved April 20, 2009 from http://www.altc.edu.au/resource-raising-profile-eassessments-crisp-adelaide-2008
- Dinan-Thompson, M., Hickey, R., & Lasen, M. (2010). E-portfolios as a means of assessing WIL in the Graduate Diploma of Education. *Australian Collaborative Education Network Conference Proceedings*, pp. 457-468. Retrieved October 14, 2010 from www.acen.edu.au/conferences/ACEN-2010-Proceedings.pdf
- Goulter, I. (2007, November). *Work-integrated learning: Building bridges between employers and universities*. Keynote Address presented at Effective Teaching and Learning 07, Queensland University of Technology, Kelvin Grove, Brisbane, Australia.
- Hickey, R. (2010). *ED5218 subject outline JCU Cairns*. Cairns, Australia: James Cook University.
- Herrington, J., Reeves, T., Oliver, R., & Woo, Y. (2004). Designing authentic activities in web-based courses. *Journal of Computing in Higher Education*, 16(1), 3–29.
- Herrington, J., Reeves, T., & Oliver, R. (2007). Immersive learning technologies: Realism and online authentic learning. *Journal of Computing in Higher Education*, 19 (1), 80-99.
- IRU (Innovative Research Universities) Australia. (2008). Work-integrated learning: Principles of good practice to guide member universities in the strategic development and management of WIL. Retrieved July 23, 2009 from http://www.irua.edu.au/pdf/WILPrinciplesofGoodPractice.pdf
- JCU (James Cook University). (2005-2010). *Graduate attributes*. Retrieved October 29, 2010 from http://www.jcu.edu.au/policy/allatoh/JCUDEV_007031.html
- JCU (James Cook University). (2008). *WIL*. Retrieved June 7, 2010 from www.jcu.edu.au/teaching/wil/JCUPRD 038535.html
- JCU (James Cook University). (2010). *Assessment practices policy*. Retrieved June 7, 2010 from http://www.jcu.edu.au/smd/current/JCUDEV 016741.html
- Klenowski, V., Askew, S., & Carnell, E. (2006). Portfolios for learning, assessment and professional development in higher education. *Assessment & Evaluation in Higher Education*, 31 (3), 267-286. Retrieved June 7, 2010 from http://www.informaworld.com/smpp/section?content=a727476615&fulltext=713240928
- Lankshear, C., & Knobel, M. (2010). A handbook for teacher research: From design to implementation. England, UK: Open University Press.
- Nash, R., & Sacre, S. (2009, November). *Integrating e-portfolio into an undergraduate nursing course: An evolving story*. Paper presented at the Assessment in Different Dimensions: A conference on teaching and learning in tertiary education, RMIT University, Melbourne, Australia.
- Oliver, B. (2010). Benchmarking with a focus on Graduate Employability: Why, how and with what? *Australian Collaborative Education Network Conference Proceedings*, pp. 352-359. Retrieved October 14, 2010 from www.acen.edu.au/conferences/ACEN-2010-Proceedings.pdf
- Patrick, C-J., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008, December). The WIL [Work Integrated Learning] report: A national scoping study [Australian Learning

- and Teaching Council (ALTC) Final report]. Brisbane, Australia: Queensland University of Technology.
- Penny, C., & Kinslow, J. (2006). Faculty perceptions of electronic portfolios in a teacher education program. *Contemporary Issues in Technology and Teacher Education*, 6(4), 418-435.
- QCT (Queensland College of Teachers). (2006). *Professional standards for Queensland teachers* (graduate level): A guide for use with graduate students. Toowong, Qld, Australia: Author. Retrieved on August 25, 2009, from http://www.qct.edu.au/standards/documents/PSQT_GradLevel_v3_Web.pdf
- QCT (Queensland College of Teachers). (2010). *Panel for program approval: James Cook University. Report of phase two visit to Cairns Campus Graduate Diploma of Education.* Toowong, Queensland, Australia: Author.
- Smith, T., & Lowrie, T. (2009). Communicating collaboratively with peers, mentors and supervisors. In R. Ewing, T. Lowrie & J. Higgs (Eds.), *Teaching and communicating: Rethinking professional experiences*. (pp. 165-175). South Melbourne, Australia: Oxford University Press.
- Yorke, M. (2010, October). *WIL-fully assessing: Shifting the summative assessment paradigm*. Keynote Address at Australian Collaborative Education Network Conference, Perth, Australia.
- Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college- and university-based teacher education. *Journal of Teacher Education*, 61, 89-99.

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ABOUT THE JOURNAL

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