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Inquiry-based Learning in Teacher Education: A Primary Humanities Example

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Abstract: Inquiry-based learning features strongly in the new Australian Humanities and Social Sciences curriculum and increasingly in primary school practice. Yet, there is little research into, and few exemplars of, inquiry approaches in the primary humanities context. In this article, we outline and explain the implementation of a place-based simulation as a vehicle for inquiry in a humanities subject in a teacher education course. Preliminary findings of surveys of pre-service teachers conducted pre and post the implementation of the inquiry model suggest increased engagement and enhanced learning outcomes. Further analysis is required in order to determine the depth of pre-service teachers' understanding of inquiry approaches.

Introduction

The value of inquiry-based learning approaches have long been recognised in school education and there is growing evidence of the efficacy of, and movement towards, inquiry approaches in higher education undergraduate courses. Often associated with the work of Dewey (1938) and Bruner (1966) and constructivist learning theory, inquiry-based learning is commonly described as an interactive, student-driven process, where knowledge is constructed rather than transmitted. The inquiry approach features strongly in the new Australian Humanities and Social Sciences curriculum and is supported by various models in an array of humanities teacher education textbooks. Yet, while inquiry has a long history and currently endorsed in the national curriculum, there is remarkably little research into its use in the humanities, particularly in the primary school context.

To address the dearth of research in this area, we developed a study which had two key goals. Our first endeavor was to design a place-based simulation as a vehicle for inquiry that would engage pre-service teachers and enhance learning outcomes. Secondly, we sought to explore the efficacy of this inquiry-based learning approach in a higher education (teacher education) setting in terms of changes in perceptions and conceptions of inquiry and the quality of pre-service primary teacher's inquiry responses and planning. Through both modelling inquiry pedagogies and immersing pre-service teachers in an inquiry, we hoped that they would translate their experiences into carefully designed and scaffolded inquiry units. As a number of studies have shown, the transfer of education theory and practice in initial teacher education courses to classroom settings is seldom linear and not always successful (Scott & Baker, 2003; de Jong, Cullity, Sharp, Spiers, & Wren, 2010; Wideen, Mayer-Smith & Moon, 1998; Zeichner &

Tabachnick, 1981). The literature suggests that, in order to advance pre-service teachers' knowledge and understanding of education theory and practice, it is incumbent on teacher educators to examine pre-service teachers' prior experiences and understandings. By identifying common conceptions and perceptions of inquiry pedagogy, teacher educators are better able to support pre-service teachers in analysing and extending their understanding and practice of inquiry-based pedagogy.

In this article, we outline our approach to inquiry and briefly explore some of the preliminary findings of two written surveys. The first survey was conducted at the beginning of a humanities unit to gauge pre-service teachers' experiences and perceptions of inquiry-based learning. The second survey, presented toward the end of the unit, compares pre-service teachers' perceptions and conceptions after immersion in the five week in-class inquiry experience. In ensuing articles, we will report in more detail on the analysis of surveys and pre-service teachers' inquiry responses and planning that formed their assessment tasks. In presenting these findings, we seek to contribute to a significant, yet under theorized, aspect of primary humanities teacher preparation. This study is timely in the light of the Humanities and Social Sciences national curriculum development in Australia.

The next section begins with a brief exploration of the understandings and challenges of inquiry-based learning in the higher education setting. This literature has informed the delivery of inquiry at our institution and we discuss some of the ways we have overcome staff and student concerns. We then provide examples of the ways in which inquiry is understood in the Australian Humanities and Social Sciences curriculum for History, Geography, Civics and Citizenship, and Economics and Business and present some popular inquiry models used in the Australian primary school context. This is followed by an outline and explanation of the inquiry sequence we implemented through a primary humanities unit for pre-service teachers in a teacher education course. In the conclusion, we draw on some of the findings from preliminary analysis of pre-service teachers' survey responses to suggest directions for further investigation.

Inquiry in Higher Education

The meanings of inquiry-based learning in higher education are multiple and contested and subject to different interpretations within and across disciplines and settings. There are a number of education practices that have been associated with inquiry-based learning, for example, problem-based learning (Chin & Chia, 2004; Savery, 2015), discovery learning (Gijlers & de Jong, 2005), project-based learning (Helle, Tynjala, & Olkinuora, 2006), experiential learning (Kolb & Kolb, 2005), cooperative learning or group-based learning (de Jong, Cullity, Haig, Sharp, Spiers, & Wren, 2011). Despite the diversity in terminology, inquiry, in the higher education literature, is often broadly described as approaches to teaching that are question driven and problem based (Aditomo, Goodyear, Bliuc, & Ellis, 2013; Justice, Rice, Roy, Hudspith, & Jenkins, 2009). Inquiry is viewed both as a means of gaining knowledge and new understanding, as well as a method of teaching that prepares students to become researchers and lifelong learners (Justice et al, 2009; Spronken-Smith & Walker, 2010). Spronken-Smith and Walker (2010) have identified three different modes of inquiry in higher education - structured inquiry, guided inquiry and open inquiry - which are classified according the level of guidance and support provided by teachers. Levy and Petrulis (2012) differentiate inquiry as either discovery oriented (building new knowledge) or information oriented (exploring existing knowledge) and

provide a framework for progression through successive levels of Identifying, Pursuing, Producing and Authoring. According to the schemas above, the inquiry in this study was information oriented (Levy & Petrulis, 2012); it began as ‘structured’ inquiry but over time a ‘guided’ approach was employed (Spronken-Smith & Walker, 2010).

There is substantial international interest in increasing the role of inquiry in undergraduate courses and across a range of disciplines (Aditomo et al, 2013; Levy & Petrulis, 2012). It is argued that traditional didactic, memory-oriented styles of teaching no longer meet the learning needs of students (Justice et al, 2009). Inquiry, it is contended, reflects a deep learning approach that is more student-centered, engages students’ interest in the subject-matter and offers opportunities for practical application (Vajoczki, Watt, & Vine, 2011). However, there have also been criticisms of the discourse of ‘learner-centred’ and its promotion as “the recipe” for producing “creative learners who think independently and take responsibility for their learning” (Phan, 2014, p. 392). In this discourse, the terms ‘teacher-centred’ and ‘learner-centred’ are constructed as binaries; as mutually exclusive or polar opposites. This representation assumes teacher instruction is the inferior and undesirable form of pedagogy (Phan, 2014). In this article, we argue that in effective inquiry, the teacher plays a central and essential role in engaging, motivating, directing, consolidating and extending learning (Hoepper, 2014). This may involve explicit teaching or direct instruction to extend students’ knowledge bases and/or develop students’ investigative and thinking skills (Reynolds, 2014).

A number of challenges in implementing inquiry or problem-based learning pedagogies within a higher education setting have been identified in the literature. These include resistance from teaching staff, a lack of understanding of inquiry pedagogy (Justice et al, 2009), inconsistencies in teacher’s perceptions of inquiry (Vajoczki, Watt, & Vine, 2011) and time constraints (Yuen & Hau, 2006). To counter the possibility of staff resistance or lack of understanding, in this study, we sought humanities teaching staff who had prior experience in inquiry-based pedagogy and were committed to, and conversant with, inquiry approaches. While acknowledging the time consuming nature of a student-centred approach, the researchers were confident that any sacrificing of conceptual content knowledge would be offset against the depth of understanding of pedagogy gained, the increased level of engagement and the development of life-long inquiry skills in pre-service teachers. This study also took into account student-identified concerns related to group assessment (Edwards & Hammer, 2007; de Jong, Cullity, Haig, Sharp, Spiers, & Wren, 2011) and student anxiety around open-ended assessment tasks (Edwards & Hammer, 2007). The open-ended, group inquiry tasks were carefully scaffolded by tutors and weekly responses were individually completed and assessed.

Critical Inquiry in Teacher Education

Critical pedagogy with its roots in critical theory (for example, Freire, 1996; Giroux, 1988; McLaren, 1989) frames our approach to inquiry. Critical inquiry pedagogy, with a focus on social injustice and relations of power that produce inequalities, “examines and promotes practices that have the potential to transform oppressive institutions or social relations, largely through educational practices” (Keesing-Styles, 2003, no pages provided). As proponents of such an approach, we encourage activities that enable “participants to interrogate the world around them as well as to hold their own beliefs up for interrogation” (Fecho, 2000, p. 195). We aim to assist pre-service teachers to challenge dominant and taken-for-granted constructions of the

socio-political and economic realities that shape their lives and the lives of their students. In humanities, this involves an examination of “a variety of alternative systems or competing viewpoints” (Ross & Hannay, 1986, p. 10). In the preparation of humanities teachers, our intention is to not only challenge pre-service teachers’ values, assumptions and beliefs but to also assist these educators to instil in their students “the same kind of critical consciousness that enables them to read and act upon the world around them” (Bartolome, 2004, p. 98). We do not claim wholesale success in our critical aims, but note that a critical perspective underpins our philosophical approach to the implementation of the inquiry simulation under study, our research into inquiry-based learning and teacher education more broadly.

As shown in the following account of the ways in which inquiry is described in the Australian Humanities and Social Sciences curriculum, a critical inquiry approach is not always made explicit. However, it is suggested that critical inquiry is endorsed through the General Capabilities, specifically *critical and creative thinking*, *ethical understanding* and *intercultural understanding* (Hoepper, 2014, p. 55). It is argued that through these capabilities the Australian curriculum makes a commitment to the values of human rights, social justice and ecological sustainability (Hoepper, 2014). We now turn to an examination of inquiry in the specific disciplines in the Humanities and Social Sciences curriculum area.

Australian F-10 Curriculum & Inquiry

In the new Australian curriculum, the Humanities and Social Sciences curriculum encompasses History, Geography, Civics and Citizenship, and Economics and Business. At the primary level, History and Geography curriculum has been developed for Foundation to Year 6, while, at the time of publication of this article, curricula for Economics and Business for Years 5-6 and Civics and Citizenship for Years 3-6 were awaiting final endorsement. In the Australian context, an interdisciplinary approach to humanities is common in primary schools. Reynolds (2014) contends that primary teachers integrate curriculum areas wherever possible, in order to overcome crowded curriculum concerns and “meaningfully manage their school day” (p. xiii). There are also sound educational reasons for an interdisciplinary approach. Tudball (2007), for example, states that humanities disciplines “borrow knowledge from each other and the study of any one discipline is enhanced by knowledge of the others” (p. 15). Maina (2004) also points out that knowledge, skills and processes required in inquiry typically traverses disciplines; the nature of the inquiry or research demands tools and data that are not confined to the artificial boundaries of subject areas.

An inquiry approach underpins the Humanities and Social Sciences curriculum area. For example, in the Australian geography curriculum, the content is divided into two strands one of which is ‘Geographical Inquiry and Skills’. Each year level includes key inquiry questions that provide a framework for study that “proceed through the collection, evaluation, analysis and interpretation of information to the development of conclusions and proposals for actions” (ACARA, 2015c). The description of content structure explains that “Inquiry will progressively move from more teacher-centred to more student-centred as students develop cognitive abilities and gain experience with the processes and methods...” (ACARA, 2015c). As well as being central to the pedagogical approach for teachers of Australian geography, inquiry is viewed as a methodology for on-going, life-long learning for students. One of the five core aims states that

geography seeks to develop in students “the capacity to be competent, critical and creative users of geographical inquiry methods and skills” (ACARA, 2015c).

The study of Civics and Citizenship is also framed around inquiry with a focus on developing in students the “skills of inquiry, values and dispositions that enable them to be active and informed citizens; to question, understand and contribute to the world in which they live”. The Civics and Citizenship Skills strand focuses on the skills of “questioning and research; analysis, synthesis and interpretation; problem solving and decision making; and communication and reflection” (ACARA, 2015a). The skills strand in Economics and Business follows a similar inquiry sequence that includes “the skills of questioning and research; interpretation and analysis; economic reasoning, decision-making and application; and communication and reflection” (ACARA, 2015b). While the skills in History are not labelled as inquiry, the rationale for History states:

History is a disciplined process of inquiry into the past that develops students' curiosity and imagination... The process of historical inquiry develops transferable skills, such as the ability to ask relevant questions; critically analyse and interpret sources; consider context; respect and explain different perspectives; develop and substantiate interpretations, and communicate effectively. (ACARA, 2015d)

Although the language varies across the disciplines, the curriculum for Geography, Civics and Citizenship and Economics and Business provides a sequence for inquiry based on questioning, research and analysis, reflecting and responding. The History discipline, while supporting an inquiry approach, does not provide such a prescriptive order of inquiry steps. Developing a common inquiry language and approach may have been a lost opportunity for primary Humanities and Social Sciences curriculum. A common schema for inquiry across the humanities would be particularly useful in assisting primary teachers in their development of integrated inquiry units.

Different Inquiry Approaches

While the language and process of inquiry in the Australian curriculum suggests some inconsistencies, there has been an endeavor in Australian humanities teacher education textbooks to provide humanities inquiry schema to assist teachers in the facilitation of inquiry based learning. These inquiry models have a history extending to the late 1980s and 1990s when they appeared in state education humanities curriculum guidelines. The TELSTAR model, for example, was developed by the Department of Education in Queensland in 1994 and the acronym represents seven phases of inquiry, that is, Tune in, Explore, Look, Sort, Test, Act, Reflect (cited in Marsh & Hart, 2011). Another commonly cited schema is the ‘Integrating Socially’ model (Hamston & Murdoch, 1996) which describes six stages of learning; tuning in, preparing to find out, sorting out, going further, making connections and taking action. More recently introduced to the Victorian primary classroom is the e5 Instructional model (Department of Education & Training, 2015). While more commonly used in science education, the e5 inquiry framework has five phases or domains of inquiry; engage, explore, explain, elaborate and evaluate. These models for inquiry are designed to support classroom (and pre-service) teachers in the construction of a progression of learning activities that assist in the development of investigative and thinking skills.

While the language differs, each model described above follows a similar framework, and can broadly be summarized by Gilbert's (2014, pp. 75-77) three stages described below.

1. Establishing what we want to find out: Posing questions & planning inquiry
2. Finding out: Collecting & analysing evidence
3. Deciding what to do with what we've found out: Concluding, reflecting & responding to the inquiry

This three stage framework was adopted in the humanities unit in this study. Researchers believed that Gilbert's model accommodated the different discipline iterations of the inquiry stages in the Humanities and Social Sciences curriculum outlined above. In addition, researchers' previous experience using more expanded models (such as the six stage Hamston and Murdoch (1996) model) in humanities education supported the utilisation of a simpler model. Researchers found that pre-service teachers were often confused by the large number of steps and frustrated when their planning did not fit into what was frequently assumed to be discrete stages of learning (Bateman, 2014). We recognise here that inquiry is not necessarily a linear process and can involve some back and forth movement between and across stages, when new questions and plans emerge and evolve through student investigation.

Methodology & Study Context

Participants in this study were pre-service teachers enrolled in the 4th year of a Bachelor of Education (Primary) degree and completing the second of two humanities units in the course. Data collection methods included two surveys of pre-service teachers and the collection of assessment tasks from consenting pre-service teacher participants. Participant assessment tasks (in the form of weekly tasks and an inquiry unit plan) will be analysed to evaluate the efficacy of the inquiry simulation in terms of improving the quality of inquiry understanding and planning. The aim of the surveys was to examine pre-service teachers' conceptions and perceptions of inquiry-based learning before and after their immersion in the five week simulation. The surveys were provided in hard copy and invited short-answer written responses to a series of questions based on themes. The first survey was completed in the second week of the trimester and questions related to three main themes: 1) experiences and perceptions of inquiry at primary and secondary levels (as a student and as a pre-service teacher); 2) conceptions of an inquiry approach (including what they believed to be fundamental components of inquiry); and 3) perceived confidence (and concerns) in employing an inquiry approach in future teaching. The second survey, completed within the final two weeks of classes and in a similar format to the first, focused on perceived changes and/or improvements (if any) in their conception and approaches to inquiry-based learning (including factors that influenced change). Questions related to perceptions of inquiry as a teaching approach and future implementation of inquiry (similar to theme 3 in survey 1) concluded the second survey.

Surveys were anonymous and administered (in hard copy) by the researchers' associates; these were people who had no direct association with the delivery and/or assessment of the humanities unit. Of the 100 participants who completed the first survey, 55% were from a Victorian regional campus at Geelong and 45% from the Burwood campus in Melbourne, Victoria. Seventy five pre-service teachers completed the second survey – 65% from Burwood and 35% from Geelong. The anonymity of surveys meant that we did not know how many of the

participants who completed the first survey completed the second survey and this lack of continuity is a limitation.

Deakin Island Immersion: Inquiry in Practice

Deakin Island is a fictional place, based on a real location between Victoria and Tasmania. A place-based inquiry was a deliberate choice in order to integrate many of the environmental, economic, political, social and cultural elements (Smith, 2007) of the primary humanities curriculum. As Smith explains, place-based learning provides opportunity for more authentic forms of teaching and learning including “cultural and historical investigations, environmental monitoring and advocacy, real-world problem solving, entrepreneurialism, and involvement in public processes” (2007, p. 191). Furthermore, following Gruenewald (2003), we sought to combine place-based education and critical pedagogy so that, rather than merely learning about the place, place became a catalyst for a series of learning activities that encouraged pre-service teachers to identify how places are shaped and to recognise and utilize the resources and actions that might contribute to a socially and environmentally just future for the place.

The purpose of the Deakin Island inquiry was twofold. We sought to use Deakin Island in tutorials as a way to immerse pre-service teachers in an inquiry sequence in order to advance their understanding and practice of critical inquiry pedagogy. A further aim was to develop discipline skills, knowledge and understanding through active learning and collaborative problem solving. The Deakin Island inquiry was conducted in the first five weeks of classes in a humanities unit. Each week in tutorials, tutors provided contextual information about the Island and pre-service teachers, working in small groups of four-six, addressed weekly discipline-focused scenarios and inquiry questions. Individual responses to these tasks were submitted weekly and formed the first assessment. In the tutorials, we aimed to connect the inquiry to discipline content, drawing on a different aspect of the Humanities and Social Sciences curriculum (i.e., Geography, History, Civics and Citizenship and Economics and Business) each week. Where possible, the three cross-curricula priorities of Sustainability, Asia and Australia’s engagement with Asia, and Aboriginal and Torres Strait Islander histories and cultures, were also incorporated. Recorded lectures and theoretical readings supported the tutorial activities and weekly tasks. Over the duration of the Deakin Island experience, topographic, demographic, socio-cultural, historical and environmental data were accrued and pre-service teachers engaged in posing and answering inquiry questions.

The second assessment task (due at the conclusion of the unit) involved designing a place-based humanities inquiry unit suitable for upper primary students. After the Deakin Island immersion, pre-service teachers were introduced to Gilbert’s (2014) inquiry model and were required to structure their inquiry based on this three stage model. This assessment provided information about pre-service teachers’ understanding of inquiry as well as what they had learned about humanities discipline-specific knowledge, pedagogical content knowledge, learning activities, resources and curriculum.

Some Preliminary Findings and Discussion

While analysis of assessment tasks are yet to be completed, researchers have undertaken some preliminary analysis of the two written surveys. In particular, we have investigated the ways in which the simulation has improved pre-service teacher engagement and enhanced unit learning outcomes. We have also explored changes to, and perceived influences on, conceptions of inquiry and confidence in inquiry pedagogy.

Findings suggest that pre-service teachers generally enjoyed the Deakin Island approach to inquiry learning. Comments, like “The tutorial activities have been fantastic. I have learnt how to develop lessons better” (Survey 2, 2015) and “As it was quite enjoyable, I would use the majority of these lessons in an adapted form” (Survey 2, 2015), suggest both a high level of engagement with tutorials and a broadening and strengthening of pre-service teachers’ lesson design skills. They acknowledged the value of an immersion experience, for example, “The experience through immersion made the whole learning experience relevant and exciting” (Survey 2, 2015) and noted that their understanding of inquiry “Improved through actually doing the inquiry lessons” (Survey 2, 2015). One student commented that this unit (in the fourth year of their course) was the first time they had directly engaged in the concept of inquiry learning, stating “The idea of inquiry was mentioned throughout the (B Ed) course, but was not explored in depth, whereas in EEO410 it was explored in a practical way” (Survey 2, 2015).

Nearly all (93%) of the respondents in the second survey indicated a perceived improvement in understanding of inquiry and sometimes pre-service teachers described this as a deepening of their conception of inquiry-based learning. For example, “Tutorial activities were helpful to deepen my understanding of inquiry learning as it opened me to new ideas and different ways of thinking” (Survey 2, 2015). As indicated in the quotations above, most pre-service teachers attributed this enhanced understanding of inquiry to the tutorial activities. However, a significant proportion (approximately 25%) indicated that the assessment tasks aided their understanding and some noted the importance of being able to reflect on their immersion experience to complete assessment tasks. For instance, “Relating the in-class activities to the 3 stages [of inquiry] (immersion/finding out/celebration) that activities/learning experiences would fit in. I’m now more familiar with the Australian Curriculum and how it can be used to guide the planning of inquiry” (Survey 2, 2015). Another pre-service teacher stated, “Deakin Island is a great way to model inquiry learning and how we can engage our [own] students. Having tutorials that allow us to get involved in the activities/experiences and also being able to plan an entire unit, helped understand the inquiry approach” (Survey 2, 2015).

Almost 75% of respondents in the second survey reported greater confidence in teaching with an inquiry approach. This compares with about 40% who signaled confidence prior to the Deakin Island intervention. One pre-service teacher reported “I feel more confident in planning an inquiry unit/lesson which is student driven and believe in the benefits of this approach” (Survey 2, 2015). Another stated, “I personally feel I need more confidence, but feel confident I’m on my way” (Survey 2, 2015). Even though we are encouraged by this increase in confidence, we also acknowledge that confidence does not necessarily link to enhanced professional practice (Orr, 2012; Preston, 2014) or equate with confidence in all aspects of teaching. For example, some pre-service teachers reported concerns with the creative aspects of lesson development, “I’m still lacking confidence in thinking of creative and stimulating activities that can be implemented to immerse students in inquiry” (Survey 2, 2015) and doubts,

such as, “Will I be able to motivate all students to become involved and progress their learning?” (Survey 2, 2015).

Survey responses suggest that the Deakin Island experience had a transformative effect on some pre-service teachers’ conceptions of pedagogy. One pre-service teacher, for example, stated, “I now believe more in being a guide for learning, rather than presenting students with all of the evidence, explanations and facts” (Survey 2, 2015). Others noted a greater appreciation of hands-on learning; “It has given me a deeper understanding of hands-on activities and a more interesting approach to teaching” (Survey 2, 2015) and “Humanities needs to be more than textbooks, students need to gain from hands-on learning” (Survey 2, 2015). There is also evidence that the modelling of place-based pedagogy (Gruenewald & Smith, 2008) in tutorials has built capacity in pre-service teachers’ to recognise the learning opportunities afforded by local contexts. For example, one pre-service teacher declared that in this unit “I learnt that you can teach a whole unit of work around a ‘place’, by incorporating all humanities areas” (Survey 2, 2015) and another stated that the unit “Showed how you can immerse students in a place and do relevant activities based around that place” (Survey 2, 2015).

While heartened by the positive results described above, we are also wary of making too many bold claims. Our preliminary analysis of surveys shows little evidence of Gruenewald’s (2003) *critical* pedagogy of place. A concern to the researchers is the diminutive number of references made by pre-service teachers to lectures and readings as a means of developing their understanding of inquiry-based education. Comments in response to a question on what helped understanding of an inquiry approach, such as, “Tutorial activities only, lectures and readings less effective” (Survey 2, 2015) lead us to query the level of sophistication in pre-service teachers’ conceptions of place-based inquiry. Our expectation was that engagement with these resources would extend and deepen pre-service teachers’ critical consciousness. In the next stage of analysis, we will specifically examine the degree of criticality in pre-service teachers’ unit plans and weekly tasks. This analysis will also examine the veracity of the relationship between increased confidence and improved quality of inquiry planning.

Conclusion

This article reports on the experience of implementing inquiry-based learning in the teaching and learning of humanities for fourth year primary pre-service teachers. The aim of this intervention was to provide an alternative to the traditional content-driven mode of curriculum delivery in order to assist pre-service teachers do the same in their classrooms. Modelling and being immersed in an inquiry sequence, we believed, would assist pre-service teachers transfer this methodology to the classroom. Moreover, using a place-based framework, we sought to illustrate the possibilities of an integrated approach to addressing the primary Humanities and Social Science curriculum, specifically Geography, History, Civics and Citizenship and Economics and Business. We argued that the Australian primary curriculum affords opportunities for critical inquiry and explained our aim to instill in pre-service teachers a critical consciousness which, in turn, they would pass onto their students.

We present this snapshot of Deakin Island inquiry as a model of one way to present an inquiry investigation in a teacher education course in a higher education setting. We suggest that the advantage of having a real world simulation as a vehicle for inquiry is that it engages pre-service teachers and enhances learning outcomes and perceived understandings. While

preliminary findings seem to point to success in increasing pre-service teachers' confidence in implementing inquiry methodology, we are cautious about the realisation of our critical aims. Further analysis of surveys and assessment tasks is required to examine pre-service teachers' grasp of critical inquiry. We acknowledge that this model can be improved and we will modify it in the future based on the critical reflection of the researchers and feedback from pre-service teachers and tutors. It is our hope that through interventions like the Deakin Island inquiry the goals of critical inquiry teaching, as promoted in the Australian curriculum and long supported in humanities literature, will be translated into practice.

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