Field 'Work' Vs 'Feel' Trip: Approaches to Out –of-Class Experiences in Geography Education

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Abstract

Fieldwork is viewed as integral to geography teaching and acclaimed benefits often include holistic, student-driven learning, where all the senses are engaged and the impacts are more than cognitive. While these benefits are often assumed, in this paper, I argue that geography fieldwork in schools is often teacher-led and focused on the intellectual task of knowledge acquisition and skill development. Based on a qualitative content analysis of examples of fieldwork in a state geography teachers' journal, I assert that the affective and sensory dimensions are often used to promote the benefits of fieldwork, but seldom are explicitly addressed through fieldwork pedagogy and learning activities in school geography. I contend that this is a missed opportunity for a deeper, more embodied and critical engagement with, and response to, the places visited.

Introduction

Fieldwork has traditionally been a significant component of geography education and is often described as a defining feature of the discipline and an effective mode of learning (Casinader, 2016; Fuller, Edmondson, France, Higgitt, & Ratinen, 2006; Hope, 2009; Marsh & Hart, 2011; Matthews & Cranby, 2014; Taylor, Boon, & Kriewaldt, 2012). Notwithstanding the many claims supporting the benefits of fieldwork, there is little research into current approaches to geography fieldwork and the value of these methods in the school context. In school education discourse in Australia and elsewhere, it is often assumed that geography fieldwork pedagogies have progressed from traditional, teacher-centred (or *Cook's Tour* [1]) approaches to more contemporary, student-centred, inquiry-based strategies (Marsh & Hart, 2011). In this paper, I challenge this assumption through examining fieldwork exemplars in a state-based journal for geography teachers. Throughout the paper, I refer to these fieldwork examples, where possible, using numbers (see table 1). I have taken this approach for two reasons. First, I avoid referring to individuals by name as the aim is not to be critical of individual's fieldwork practice. Second, I am endeavouring to illustrate a tendency – greater than any one individual teacher – towards a more teacher-directed approach to fieldwork. Such an approach to fieldwork is, I argue, in contrast to the rhetoric suggesting that fieldwork should be part of a student-centred, inquiry process. Further to this, I contest popular claims that a central aim of fieldwork is to engage the affective and sensory domains. This is not to suggest that the fieldwork does not have sensory and affective impacts; rather, I argue that, because these domains are not explicitly addressed, the opportunities for a more critical, embodied, and socially engaged interaction with places are reduced.

This paper begins by exploring the ways in which fieldwork is described in Australian State and National curriculum documents. This is followed by an outline of the various approaches to geography fieldwork and the stated benefits of fieldwork in the Australian context. Here, I foreground the literature that draws attention to the holistic, sensory and affective attributes of fieldwork. Drawing on Golubchikov's (2015) idea of 'feel-trip', I then explore the potential for activating affective learning through fieldwork experiences to develop reflective and critical skills that promote responsible and ethical engagement with social and ecological issues. I then investigate these possibilities through an examination of fieldwork described in a Victorian geography journal, *Interaction* over the past six years. In concluding, I recommend more active, embodied fieldwork experiences that go beyond taking photographs, drawing field sketches and answering pre-determined questions. Such fieldwork, I contend, is not only more appealing to students but also better supports them to develop deeper understandings of their world.

Fieldwork in the Curriculum

Fieldwork is defined in the Australian Curriculum (version 8.2) as "[a]ny activity involving observation and recording of information outside

a classroom. It could be within the school grounds, around neighbouring areas or in more distant locations" (ACARA, 2016b). In version 7.5 of the Australian Curriculum, the significance of direct experience in geography is emphasised and encouraged at all levels: "The curriculum should also provide opportunities for fieldwork at all stages, as this is an essential component of geographical learning" (ACARA, 2016c). Interestingly, this statement is not present in the latest version (version 8.2) of the curriculum and there is no direct reference to the term, *fieldwork* in the Foundation to Year 10 curriculum descriptions. However, there is potential for fieldwork through activities such as the collection of data and information "from observations" (Foundation to Year 4) (ACARA, 2016d) and from "primary sources" (Years 5–10) (ACARA, 2016d; 2016e).

In the Victorian Curriculum, fieldwork is mentioned in the preamble to the geography curriculum (VCAA, 2016a) and specific reference is made to fieldwork in the Geographical Concepts and Skills strand through the content description: "Collect and record relevant geographical data and information from the field" for Foundation to Year 6 (VCAA 2016b). In the Victorian secondary curriculum, the language reverts to that used in the Australian Geography curriculum, where "from the field" is replaced with "from useful primary and secondary sources" (VCAA 2016b).

While trained geographers would see opportunity for fieldwork in the above curriculum, the use of terms like 'primary sources' may limit opportunity for the untrained eye. And, given the reduction in the number of qualified secondary geography teachers (Kriewaldt, 2006), and the resultant lack of teacher confidence, expertise and awareness (Erebus International, 2008), non-explicit reference to fieldwork in the content descriptions may compromise the programming of out-of-classroom experiences. This, together with cost barriers and competing time and curriculum demands, puts extra pressure on the conduct of fieldwork in schools (Casinader, 2016).

In the Australian Senior Secondary Geography curriculum specific reference is made to fieldwork:

> Students apply geographical inquiry through a more advanced study of geographical methods and skills in the senior years. They learn how to collect information from primary and secondary sources such as field observation and data collection, mapping, monitoring, remote sensing, case studies and reports. Fieldwork, in all its various forms, is central to such inquiries as it enables students to develop their understanding of the world through direct experience. (ACARA, 2016f)

In the Victorian Certificate of Education (VCE) fieldwork is mandated in Units 1, 2 and 3 and students are required to produce a fieldwork report following a set template for assessment in these units (VCAA, 2014).

In the State and National curriculum descriptions, specific approaches to geography fieldwork are not identified. However, an inquiry-based methodology is promoted in the aims of the Australian Geography curriculum and in the rationale of the Victorian Geography curriculum and, in the next section, I elaborate on this in relation to a spectrum of fieldwork approaches. Further on, I will also consider the implications of disembodied fieldwork methods, commonly cited in the curriculum through expressions such as "observation and recording of information" (ACARA, 2016b), and the obscurity of other more sensual ways of fieldwork learning.

Fieldwork Approaches and Benefits

Job, Day, and Smyth (1999) from the United Kingdom describe five fieldwork strategies classified according the degree of student-centredness. These include: traditional fieldwork (which is teacher-centred and students record answers to questions); hypothesis testing (students look for answers in the field to a problem previously identified or identified in the field); geographical inquiry (students ask geographical questions then gather, evaluate and apply data from the field); discovery fieldwork (students discover their own focus and the teacher assumes role of guide); and sensory fieldwork (students use all their senses to develop *new sensitivities*, sense of place and care of place). Oost, De Vries, and Van der Schee (2011) from the Netherlands use a similar typology – a sliding scale of teacher-led to more student-centred approaches – to describe fieldwork changes over the past 50 years. At the *traditional* end, the teacher performs the role of provider of knowledge and the student is a passive consumer, while, at the other end, the student is an active inquiry-learner and the teacher is more like a coach (2011).

Marsh and Hart explain that geography fieldwork in the Australian context has "evolved from its traditional observation- and description-based origins to a diversity of learning and teaching processes" (2011, p. 269). They suggest that the shift from the traditional, passive Cook's Tour of the 1950s to the current "focus on active learning" (p. 271) is part of a global trend "among the pedagogically responsive geographical community" (p. 272). These contemporary or progressive forms of fieldwork, they suggest,

provide opportunities for firsthand, holistic learning.

Oost, De Vries, and Van der Schee (2011) report that teaching strategies in fieldwork have developed in alignment with the growing interest more broadly in "making the learning process more enquiry driven" (p. 311). In Australia, inquiry-based education has long been argued as an effective means of assisting students to investigate and make meaning of their world as well as "engendering and embedding long-term learning skills within students" (Casinader, 2016, p. 6). This commitment to inquiry is especially evident in both the new Victorian and Australian Geography curriculum. For example, one of the five aims of the Australian Geography curriculum is "the capacity to be competent, critical and creative users of geographical inquiry methods and skills" (ACARA, 2016a). Inquiry-based learning for the Humanities and Social Sciences is defined as an approach to learning that "assists students to develop their capacity for self-management, directing their own learning and providing opportunities to express and reflect on their opinions, beliefs, values and questions appropriately" (ACARA, 2016g). The Victorian curriculum also promotes an inquiry approach and, in the Critical and Creative Thinking curriculum, a structure is provided for "inquiry-based approaches to teaching" with the aim of "[h]elping students understand the fundamental role that questions and questioning play in enabling learning and developing a learning disposition is a necessary condition for deep learning" (VCAA, 2016d). In geography, this manifests in a "curriculum [that] teaches students to respond to questions in a geographically distinctive way, to collect, evaluate, analyse and interpret information, and suggest responses to what they have learned" (VCAA, 2016a). It follows that, if an inquiry-based learning approach is adopted in schools, then fieldwork would be a practical means of applying inquiry methods and skills.

In education discourse, highlighted below through an examination of Australian humanities teaching textbooks, the synergy between fieldwork and inquiry is indeed highlighted. For example, Matthews and Cranby (2014, p. 237) depict fieldwork "as an indispensable opportunity to apply concepts and inquiry methodology in a practical and holistic manner in real environments". Fieldwork, in this discourse, is portrayed as essential to geography education – as "intrinsic to the discipline as clinical practice is to medicine" (Marsh & Hart, 2011, p. 269) or "as the heart of geography" (Taylor, Boon, & Kriewaldt, 2012, p. 245). The benefits described are wide-ranging and include the development of skills in observation, data collection, analysing, research, and personal organisation (GTAV, 2003) as well as broader learning outcomes. Marsh and Hart, for example, describe the importance of "experiential, holistic learning" (2011, p. 273) through fieldwork while Taylor, Boon, and Kriewaldt, (2012, pp. 258–259) suggest that it "serves to spark student interest and deepen their wonder and puzzlement, so that they become physically and emotionally connected to places and people and can thus develop ways to make sense of the world". Reynolds (2012, p. 198) emphasises the sensory possibilities: "Fieldwork offers opportunity to engage all the senses – smell, hearing, sight, touch and even taste, which is a reason why it engages so well and is so powerful in students' memories".

Fieldwork is thus recognised in this discourse as an integral and distinctive component of the discipline that provides an authentic context in which geographic inquiry skills can be developed, and knowledge, understandings and connections to places and people deepened. Also inherent, in some of the descriptions above, is the significance of fieldwork in developing emotional connections and sensory engagement with place(s) and, in the next section, I examine these ideas further.

Affect and Sensory Engagement

While there is a recognition of the importance of the affective and sensory responses to fieldwork, these claims are generally under-theorised in the literature. In this section, I draw on Oleg Golubchikov's (2015) notion of *feel-trip* to explore the benefits of a more explicit focus on affective learning in geography. Feel-trip, Golubchikov suggests, is an "explicitly more-than-cognitive" conception of field-based teaching and learning; one that foregrounds emotional and sensory engagements in experiential learning experiences (p. 144). This conception, he argues, is important not only for "creating more stimulating learning conditions with lasting effects on students' imaginaries and thinking but also for triggering reflective and critical skills for potentially a more responsible and ethical operation of knowledge" (p. 144). Golubchikov draws on Freire and Giroux to underscore the importance of pedagogies that provide opportunity for students to engage with political and moral issues and acquire the tools to enable them to become critical and participatory citizens. Geography, he suggests, has a unique opportunity to go beyond the instrumental or "the stylized knowledge of the classroom and explore the complexities, messiness and imperfections of the real world, while constructing important imaginary tools and skills for seeking social and spatial justice" (p. 144). Golubchikov proposes the term *critical feel-trip* to stimulate discussion about the possibilities when the experiential, affective and critical domains are explicitly

activated through field-based studies. This triad, he argues, has the potential to make a significant contribution towards teaching for social transformation. This is an objective that coheres with the Australian (and Victorian) Geography curriculum's aim to empower "students to shape change for a socially just and sustainable future" and to "[enable] students to question why the world is the way it is, and reflect on their relationships with and responsibilities for that world" (ACARA, 2016h).

In response to Nairn's (2005) caution that fieldtrips do not automatically result in critical learning and may in fact reinforce existing preconceptions, Golubchikov points to the importance of *engaged* fieldwork. While promoting independent learning, he stresses that this does not mean "a hands-off approach" (p. 145) and engaged fieldwork aims to challenge students' preconceptions. This involves structured pre-trip preparation, careful choice of location and guided reflection. Affect, he suggests, is an important component of engaged fieldwork and, following pedagogical traditions, he describes affective learning as "the learner's growth . . . [through] the learner's system of feelings, values, appreciation, motivations and attitudes" (p. 145). Golubchikov proposes a reciprocal relationship exists between affective and cognitive learning. This proposition is supported by other studies of fieldwork that connect enhanced affective responses to higher order thinking and thus deeper learning performance (see, for example, Boyle et al., 2007; Foskett, 1999; Fuller, et al., 2006; Hope, 2009; Hougie, 2010; Morris, 2010). There is also a body of literature that conceptualises learning as something that happens through the body as well as through interactions with others and the environment (Ellsworth, 2005; Nairn, 1999; Wattchow & Brown, 2011). Elizabeth Ellsworth (2005, p. 1), in her book, *Places of learning*, for example, describes the importance of "the embodied sensation of *making sense*, the *lived experience* of our learning selves that make the thing we call knowledge".

The feeling aspect of the *thinking-feeling* learning self (Ellsworth, 2005, p. 1), I argue, is not always underscored in geography education. And geography fieldwork is often viewed "primarily as a cognitive process of knowledge and skill acquisition" (Israel, 2012, p. 78). Nairn (1999) notes that geography fieldwork "tends to privilege the mind, the eyes, and the hands" (p. 272). She reports on geographers' "penchant for distanced, analytical observation . . . in order to keep irrationality, emotion, and bodily complications out of the picture" (p. 273). This sort of (dis) embodiment, she argues, privileges the visual [male] geographer (Nairn, 1999; see also Rose, 1993). Phillips (2015, p. 4) similarly critiques the dominance of the visual within geography and proposes that geographers experiment with "more-than-visual, differently visual and adventurous fieldwork methods".

Elsewhere, I have articulated my own dissatisfaction with traditional methods of geographical fieldwork that support a detached view of phenomena (Preston, 2015a). What I describe as a clipboard mode of field *work*, these are primarily task-oriented experiences that favour observation of phenomena and the recording of information in response to predetermined questions. While I do not discount the value of such information gathering in terms of knowledge creation, I contend that "fieldwork which does not engage the affective domain represents a missed opportunity for deeper, more embodied engagement with place" (2015a, p. 45). Such engaged interactions, I argue, may assist participants to think differently about themselves and their surroundings (Preston, 2015a). This aim corresponds with Israel's (2012) and Golubchikov's (2015) support of a place-based framework that connects field experiences with critical (ethical) objectives and goes beyond simply learning about particular processes and phenomena.

While Golubchikov's (2015) and others' research support the benefits of a more explicit engagement with the affective domain through geography fieldwork, there is still a dearth of research on the enactment of such fieldwork in the school context. In the following, I explain a study that helps address this gap.

Context and Methodology

This research examines the fieldwork activities described by teachers in a state-based geography journal over a six year period from 2010 to 2016 (up until the submission of this article). The quarterly journal, *Interaction*, produced by the Geography Teachers' Association of Victoria (GTAV) "provides information on the latest developments in geographical education, reviews, teaching strategies and fieldwork ideas" (GTAV, 2016). It is aimed at primary and secondary geography teachers and the content of the journal is divided into sections related to geography news and views, VCE geography, Primary geography, ICT in geography, articles on lesson/unit plans, curriculum updates and ideas, book reviews, and fieldwork. For the purposes of this research, I examined the articles under the heading, *Fieldwork* except for two editions (Volume *41*(1), 2013 & Volume *44*(1), 2016) that focused entirely on fieldwork and in which most sections, for example, VCE, ICT, and so forth had a fieldwork focus.

Given my interest in exploring how Victorian teachers enact fieldwork in schools in relation to current geography curriculum, I chose to focus my study on the articles produced by teachers. I, therefore, excluded in my analysis the fieldwork articles authored by people representing organisations, such as the Werribee Open Plains Zoo and State Library of Victoria. I also excluded extracurricular activities such as the fieldwork for Geography's Big Week Out or fieldwork designed for participants at the annual conference. I acknowledge that these experiences could be adapted to school geography curriculum but my attention here is on the practices of current teachers delivering fieldwork for students undertaking geography in the existing curriculum.

In this study, I employ qualitative, content analysis methodology (Cohen, Manion, & Morrison, 2007) to examine fieldwork journal articles with two objectives in mind. First, I sought to categorise the fieldwork approaches according to Job, Day, and Smyth's (1999) typology described above. The fivefold classification – traditional fieldwork, hypothesis testing, geographical inquiry, discovery fieldwork, and sensory fieldwork – was applied to descriptions of fieldwork in the journal to evaluate the level of student- versus teacher-centredness. In this categorisation, there is a sliding scale of learner-focus whereby traditional fieldwork is viewed as mostly teacher-centred and discovery/sensory learning is deemed more student-centred (Oost, De Vries, & Van der Schee, 2011). My second aim was to identify examples of where the affective and sensory domains were explicitly activated through field-based studies.

In the following, I provide a table that summarises the fieldwork according to the level targeted, the location, descriptions of fieldwork activities, and the integration of fieldwork into the classroom curriculum. In the findings and discussion sections, I explore the types of fieldwork represented in the table and the level of commitment to stimulating an affective and/or sensory engagement with people and places. Here, I take a critical perspective acknowledging the sociocultural context of school education (Freire, 1996; Giroux, 1988; McLaren, 1989). I recognise, that these documents are thus partially constructed and situated in, and shaped by, the wider social and political environment. I acknowledge, therefore, that an examination of the journal articles alone tells an incomplete story of the discipline today. Nevertheless, a critical perspective can reveal important assumptions and habits of practice embedded in the language of fieldwork. I use this analytical framework to examine not only the trends in fieldwork but, perhaps more interestingly, to reveal the gaps in fieldwork approaches and content.

Findings

Table 1 summarises the fifteen fieldwork articles from 2010 to 2016 that meet the criteria explained above. In the next sections, I draw on this table to provide a summary of the fieldwork and an examination of these fieldwork exemplars in conversation with Job, Day, and Smyth's (1999) typology and Golubchikov's (2015) notion of feel-trip.

Fieldwork summary

As shown in column 3, of the fifteen examples, eight addressed the VCE curriculum (Unit 1 = 4, Unit 2 = 2 and Unit 3 = 1), six focused on the secondary Year 7–10 levels, and there was one

Table: 1 – Examples of fieldwork from Interaction 2010–2016

Journal articles – numbering corresponds to text referencing		**Title, Year Level, Place & Activities**	**Pre- & Post-fieldwork activities**
i)	Jamieson (2016)	*Bushfire hazards field trip to Marysville* New VCE Unit 1 – **Marysville & surrounds** 3 sites. Inquiry question. Worksheet provided. Site 1: Guest speakers: answer questions on impact of disaster; annotate 2 maps. Site 2: Complete questions on response & recovery. Site 3: Answer questions on management of future bushfire hazards.	Pre – nature of bushfires, natural & cultural impacts, response & recovery, management techniques. Post – research report.
ii)	Cross (2016)	*A boat trip on the Yarra – an example of Geography fieldwork at Year 7* Year 7 – **Yarra River** Each group/class maps a different section of the river from a boat. Group themes: recreation facilities, land use, housing style, bridges, stormwater drains, areas of erosion or deposition, litter traps & litter. According to theme, students record evidence of use, interactions & impacts; complete a labelled cross-section of river; take photos.	Pre – not identified. Post – production of an annotated wall map including data from each group; fieldwork report which requires analysis of collated data for the lower section of the river.

Journal articles – numbering corresponds to text referencing		Title, Year Level, Place & Activities	Pre- & Post-fieldwork activities
iii)	Polatidis (2016)	*Changing the land – Tootgarook Wetland* New VCE Unit 3 – **Tootgarook Wetland** 4 sites. Impact of land-use change Site 1: Macro-invertebrate testing; vegetation quadrats; bird & frog observations; waterway health observations; discussion of bore water extraction. Site 2: As above plus soil quality test; take photos. Site 3: Survey of land uses, bird & frog observations, take photos. Site 4: Walk & talk by property managers; core soil samples; field sketches; observations of waterway, frog, bird & marsupials; take photos.	Pre & Post – not identified.
iv)	Rankin (2016)	*People are connected to many places* Year 2 – **Haining Farm** Guided tour of farm to learn how milk gets from the farm to their fridge. Quiet reflection & complete a field sketch.	Pre – fieldwork within school & local park. Post – journey map drawing; class Big Book, fieldwork report.
v)	Girolami (2016)	*GPS fieldwork activities* Years 9 & 10 – **Wangaratta & Ovens River** Year 9 Introduction to GPS on school oval. At Ovens River, use GPS units to locate land use, management techniques & resources & take photos. Mark in nesting boxes & take photos. Year 10 Geocaching (find local caches & create their own) & then revisit site on Ovens River to use GPS to map vegetation types & take photos.	Year 9: Pre – practise using GPS units. Post – download information & link to photo. Year 10: Pre – introduction to geocaching. Post – publish images, location & description of types of vegetation on Google Map.
vi)	Easton (2015)	*Docklands: an example of urban renewal* VCE Unit 2 – **Docklands, Melbourne** 6 sites – Inquiry question. Worksheet provided. Site 1: Bourke St Bridge; Site 2: 700 Bourke St; Site 3: Telstra Dome concourse; Site 4: Harbour Esplanade; Site 5: Docklands Park; Site 6: No. 2 Goods Shed. Answer questions on change over time, ESD, current uses; take photos & notes; draw field sketch & label; record traffic data in table; draw cross-sections.	Pre – 6–8 lessons on change over time. Post – fieldwork report.
vii)	Liversidge & van Weringh (2015)	*Year 8 Hanging Rock fieldwork* Year 8 – **Hanging Rock** 5 sites. Worksheet provided. At each of 4 sites: list natural & human features, list management techniques & purpose, photograph features, rank listed features/characteristics, draw annotated sketch maps. At Site 2: answer questions from information boards & copy diagrams on rock formation.	Pre – not identified. Post – fieldwork report: use information to answer questions about change over time.
viii)	Boyle (2013)	*Coasts: Where the land joins the sea* Year 9 – **Torquay** 4 sites. Hypothesis testing. Worksheet provided. At each site, repeat activities: draw field sketch, record facilities, record wave frequency (fill in table), take photos, measure foreshore, mark features on map, answer questions.	Pre – not identified. Post – complete fieldwork report as an annotated visual display to answer hypothesis.
ix)	Cross (2013)	*Coastal fieldwork – making the coast your classroom . . .* VCE Unit 1– **Coastal Melbourne, Mornington Peninsula, Bellarine Peninsula & Surf Coast** 15 sites. Worksheet provided. At each location, make observations, record information (on location, description, biosphere, hydrosphere, natural processes, features, management & evidence of change), annotate aerial photographs and maps & complete cross-sections.	Pre – not identified. Post – produce data booklet. Test on analysis of data.
x)	Blamey (2013)	*Unit 2 Fieldwork: Melbourne* VCE Unit 2 – **Melbourne** – 3 sites: **Chinatown, Parliament Gardens** & **Docklands** Worksheet provided. Site 1: Draw field sketches, answer questions on features, traffic & parking management, buildings & architecture, food centre, businesses; people survey; annotate map. Site 2: Describe location & characteristics (list in table); annotate map; answer questions on parking, park use & management, spatial change; list uses of park in table. Site 3: Answer questions on physical environment, transport, civic art; people survey.	Pre – development of Melbourne & Docklands over time, distribution of public transport, Yarra River uses, policies & concepts such as ESD. Post – field report.

Journal articles – numbering corresponds to text referencing		Title, Year Level, Place & Activities	Pre- & Post-fieldwork activities
xi)	Bourke (2013)	*Guidelines for developing the fieldwork for Unit 2, Human Environments* VCE Unit 2 – **Yarra Valley** Bus trip 14 stops. Worksheet provided. List agricultural activities; name mountain range; provide direction; describe landscape; take notes from Lavender Farm talk; take photos; fill out table on river (colour/clarity, depth/flow rate, state of bank, exotic plants, land use, recreation/tourism), take notes; survey community facilities; count types of shops; take photos of traffic congestion; Alpaca farm tour & answer questions on horticulture; answer questions from information boards (Domain Chandon); draw field sketch; count dams; complete survey & answer questions on traffic, shops, housing, shopping, playground; survey people.	Post – Create a visual diary and complete 2 open book tests.
xii)	Jones (2011)	*How and why do the geographic characteristics of rivers vary?* VCE Unit 1 – **Student choice (Distance Education)** Inquiry question. Worksheet provided. Data collection – tick a box & short answers related to: location & description of river, surrounding land use, water quality, pollution, stream habitat, flora & fauna, impact of human activity; field sketch & photos; river velocity & depth calculations; draw cross-section.	Pre – materials on natural processes & characteristics of rivers; stream habitat, assessment & velocity, discharge & cross-section measurements. Post – Fieldwork presentation.
xiii)	Brasier (2011)	*Fieldwork in the Otway Ranges* VCE Unit 1 – **Great Otway National Park** 6 sites. Worksheet provided. Site 1: Answer questions related to characteristics of forest, management, human & natural changes; complete quadrant survey of section of forest; sketch tree. Site 2: Answer questions on: Source of water & natural features; take photos; quadrant survey; identify & explain changes & management policies and strategies. Site 3: Answer questions related to species, regeneration process; quadrant survey. Site 4: Answer questions from display boards related to types & characteristics of rainforests, management policies/strategies; field sketch. Sites 5 & 6: Answer questions related to water supply & forests.	Pre – class work on characteristics of forests. Post – Fieldwork report completed under test conditions.
xiv)	Griffiths & Chadzynski (2011)	*Bushfire fieldwork in the Dandenong Ranges* No level identified – **Upper Ferntree Gully–Dandenong Ranges NP** Worksheet provided. Introductory talk then 3 groups rotate through activities A, B & C: A: Bushfire survival: fire scenario – students decide where they will shelter & why. B: Answer questions on fire impact; field sketches. C: Complete Fire Hazard rating table for 3 sites & answer question. D: Complete house surveys, rate bushfire safety & answer questions.	Pre – class activities on fire risk, factors influencing spread of fire, types of fire, fire danger index, fire intensity and behaviour. Post – write up fieldwork according to set template and questions.
xv)	Miles (2010)	*Endangered species – protecting biodiversity* Year 7 – **Melbourne Zoo** Worksheet provided. Complete a worksheet: Tick off endangered species in a table, locate on a world map, fill in a table (species, habitat, location, status, reason for being endangered). Answer questions.	Pre – introduction to habitat & species distribution. Individual research. Post – complete a field report / poster.

example from the primary level (Year 2).[2] It is unsurprising that VCE fieldwork has the highest frequency given fieldwork has been mandated for Units 1, 2 and 3 in the previous and current versions of the VCE Geography study guides (VCAA, 2005; 2014). Nor is it surprising that the representation of fieldwork in the primary sector is low. Elsewhere, I have reported the lack of specialist geography training in primary teachers and the resultant narrow conceptions and practice of geography (Preston, 2014; 2015b).

While most fieldwork experiences explored the interactions between human and natural environments, locations tended to be more natural, comprising rivers (3), coasts (2), forests (4), and a wetland (1). The remainder of the fieldtrips focused on human environments including Melbourne/Docklands (2), Yarra Valley (1), Melbourne Zoo (1) and a farm (1). The type of environment chosen is generally curriculum driven; for example, in the pre-2016 iteration of VCE Geography curriculum, Unit 1 focused on Natural Environments and Unit 2, Human Environments (VCAA, 2005). However, the choice of specific location is usually a teacher and/or school decision. The focus on more natural areas is also perhaps an endeavour by teachers to use

less familiar, out-of-the-ordinary locations that are potentially more engaging for students.

From column 4 in Table 1, it is evident that for the most part, fieldwork is integrated into geography curriculum and has strong links to pre- and post-classroom activities. Nine of the examples provided clear explanations of pre-trip activities which aimed to prepare students for the fieldwork. I cannot assume, for those who did not provide pre-trip details, that preparation was lacking. It may be that, for the sake of article succinctness, the author(s) deliberately focused the text on the fieldtrip. With the exception of one, all articles identified post-trip tasks and most of these were in the form of a fieldwork report. One of the teachers, Blamey (2013, p. 31) states: "I feel it is important that students do not see fieldwork as a stand-alone activity, but instead view it as an integral and integrated part of the Geography curriculum" and it seems this is a common view held by teachers who presented fieldwork for the journal.

Approaches to Fieldwork

From the activities listed in column 3 in the table, it is clear that most fieldwork activities centred on structured tasks such as students completing answers to pre-determined questions. In fact, nearly three quarters of the fieldwork articles provided worksheets with set questions, specified activities and often blank spaces to fill. There is nothing inherently wrong with such fieldwork; it serves an important purpose in terms of "collect[ing] and record[ing] relevant geographical data and information from the field" (VCAA, 2016b). It is what I describe as a clipboard style of fieldwork and a popular pedagogical strategy to keep students focused and mentally engaged. This is common, particularly in senior geography, where there are pre-determined outcomes that are tied to assessment tasks. Often within tight timeframes, teachers need to maximise the opportunities for students to gain the fieldwork data required to fulfil learning outcomes specified in study designs. In relation to Job, Day, and Smyth's (1999) typology, this type of fieldwork is located in descriptions that are more teacher-centred than student-centred.

While I stress that this approach to fieldwork is not wrong, neither does it align with student-led, inquiry approaches described in the literature. While some teachers described their fieldwork as inquiry-based and/or included inquiry questions, the structure of the field tasks was often more aligned with Job, Day, and Smyth's description of hypothesis testing. Such fieldwork, according to Job, Day, and Smyth, is *rigid* with the focus of studies "pre-determined by teachers rather than arising from students' own field experiences and perceptions" (1999, p. 15). On the other hand, inquiry-based fieldwork, they contend, is a more student-centred approach "where small groups of students are able to work semi-independently, with each group contributing information to a broader picture" (p. 16). Job, Day, and Smyth suggest that inquiry-based fieldwork lends itself to local place study "where the issues and problems investigated have local immediacy [and] students can apply their findings to personal decision-making" (p. 15). Given this definition, the examples in this sample that were described as inquiry-based or included inquiry questions, (see, for example, Table 1, Nos. i, vi & xii) had more in common with the descriptions, and the example (see Table 1, No. viii), of hypothesis testing. There is little evidence to suggest that students had had involvement in developing inquiry field questions or influence over the structure and content of the fieldwork. I feel that the fieldwork in these instances missed the opportunity for enrichment based on student input.

In the fieldwork examples, students are never wholly passive observers; however, many of the tasks, such as recording answers to pre-determined questions, field sketching and photography, support a detached view of place (Nairn, 1996; 1999). Some activities, such as copying diagrams and answering questions based on information provided on a display board (see, for example, Table 1, Nos. vii & xiii), also reflect a tendency to replicate traditional classroom pedagogies based on structure, control and transmission. These activities could be viewed as examples of what Nairn describes as "disembodied fieldwork" (1996, p. 89) where participants are able to complete tasks without physically engaging with a place, like "observing the landscape from a hilltop" (1996, p. 89).

Two of the fieldwork examples in Table 1, could be described as a version of a Cook's Tour – an approach that combines "'look-see' and experiential fieldwork" (Fuller & France, 2015, p. 159). While more involving than a traditional Cook's Tour, both examples appear to have long periods of bus travel and a high number of short stops that limit the amount of interaction with sites. In making this observation, I am keenly aware that such trips are often borne from the constraints within which teachers must work in designing such opportunities. I also recognise that even getting students on such tours takes an enormous amount of work by teachers. One reading of such tours is that teachers are designing them in an attempt to squeeze the most out of the activity. For example, the Yarra Valley day trip (Table 1, No. xi) includes fourteen stops and involves time efficient activities such as recording information from the bus window and taking photographs. The two-day VCE coastal

fieldtrip (Table 1, No. ix), includes fifteen site stops and extends from Melbourne beaches, to the Mornington Peninsula, then across to the Bellarine Peninsula to finish at the Surf Coast. At each site, students repeat activities such as observation, recording information, annotating aerial photographs and maps, and completing cross-sections. Some geographers, for example, Fuller and France (2015), argue there is still a place for such fieldwork (especially given, in the case above, the regional focus of the Yarra Valley fieldtrip). In this paper, I am arguing that more time at fewer sites might promote more in-depth study fostering greater student engagement with place and enhanced learning.

It is evident that for many of these field trips, the teacher directs student learning and sometimes takes the role of information provider. For example, when discussing size of groups for the Melbourne fieldtrip (Table 1, No. x) the teacher says, "[T]he way I present my walking tour of Chinatown, the students need to be able to hear and participate in discussions" (Blamey, 2013, p. 29). She recognises that this is a didactic teaching style but, in this VCE fieldtrip, she also provides opportunity for a more student-led exploration of the final site. She comments:

> As students build their confidence throughout the day the fieldwork changes from being teacher-centred to student-centred. By the end of the day at Docklands, students are more autonomous, completing much more self-led exploration of the region to determine how it is being used and to develop their own perceptions of space. of space (Blamey, 2013, p.30).

Such opportunities for self-led exploration are not common (or obvious) in the fieldwork descriptions listed in Table 1. However, there are a few exceptions and, in the following section, I explore examples that I consider to be located towards the student-centred end of the spectrum.

Discovery and sensory learning through fieldwork

The most notable field experiences in terms of student autonomy and/or engagement with place are the Year 2 Haining Farm excursion (Table 1; No. iv), the Year 9/10 Ovens River GPS fieldwork (Table 1; No. v) and aspects of the VCE Melbourne fieldwork (Table 1; No. x) described above. It is pertinent to note that both the Haining Farm and the GPS fieldwork received fieldwork awards at GTAV Annual Conferences. The Haining Farm fieldwork is an example of a more embodied engagement with place. In the pre-trip preparation students visit a local park and are encouraged to engage their senses "to pay attention when they felt their feet going down a hill or around a corner" (Rankin, 2016, p. 26). During the fieldwork there is time set aside for quiet reflection in which students record their interpretations in relation to sight, smell, sound and touch. To complete a field sketch, students are encouraged to use a range of natural materials such as grass rubbings, as well as pencils. This fieldwork's focus on connections to place meets Job, Day, and Smyth's classification for *sensory fieldwork* where the aim is often about "re-establishing the somewhat fractured connections between people and nature" (1999, p. 16). Even at this young age, there is a critical emphasis on environmental change and students develop an awareness of different connections to place. For example, in a post-excursion reflection, a Year 2 student comments:

> The farmer's connection to the ngurra[2] is different to people in urban areas. I think we should look after the environment because if we don't we wouldn't be here today. We wouldn't be here because we wouldn't have our daily beverages and food a day, and trees produce oxygen that we need to breathe (Rankin, 2016, p. 28).

The Melbourne fieldwork (Table 1, No. x) provides examples of opportunities for affective engagement. For instance, students are asked to describe their impressions of laneways and how they would feel walking down these during the day, at night, in company and alone. While arguably such pointed questioning might reinforce preconceptions of laneways as places to fear, there is at least an attempt to procure an emotional response. Students' imaginations might also be engaged when asked to envision future uses of spaces in the Docklands' precinct. However, the affective component of the fieldwork is nominal and, interestingly, the teacher acknowledges that such engagement could be viewed superfluous to the *real* work of geography fieldwork:

> I also ask them to consider more unconventional and arguably "unessential" elements of the urban environment. For example, I chose to incorporate a section on civic art in Docklands as I believe this is an interesting element of the built environment, often overlooked in geographical studies which tend to focus on "functional" elements (Blamey, 2013, p. 29).

The Year 9/10 GPS fieldwork is also an example that stands out as providing students with opportunities to both engage with place and become more autonomous learners. Students use

new technologies to explore environmental action and issues in the local area. They revisit local sites within the same year and from one year to the next and this not only increases connections to place but the familiarity permits more freedom, exploration and independent learning. There seems less a focus on prediction and control over learning and more on self-directed, *playful* learning through activities such as geocaching and using GPS devices to locate and map nesting boxes, revegetation sites and vegetation types in order to record change over time. It is apposite to note that the teacher responsible for this fieldwork is an outdoor education and geography teacher and possibly well versed in the facilitation, and benefits, of experiential learning. In the teacher's biography, he describes a commitment to ". . . developing innovative lessons that can engage students with the world around them" (Girolami, 2016, p. 31).

Enhancing affective engagement

Activities that deliberately promote independent exploration, and affective, multi-sensory engagement and/or the use of new technologies represent an important development in scholarship on fieldwork experiences. Consequently, practising teachers are unlikely to have been introduced explicitly to this style of fieldwork. It is, therefore, entirely understandable that I was able to find few examples of this approach in the fieldwork practice reviewed for this article. For example, the teachers, describing the aims of the Dandenongs bushfire fieldwork (Table 1, No. xiv), note: "Our focus is also on the mechanics of fire and fire risk assessment based on objective data collection which removes it from the emotional/personal impact of more recent fires in areas close to our school" (Griffiths & Chadzynski, 2011, p. 30). This approach is endeavouring to be empathetic towards students' possible trauma by taking an objective perspective and deliberately discouraging emotional engagement. However, the teaching and learning resources for Bushfire Education produced by the Victorian Curriculum and Assessment Authority, suggests the possibility for another approach. It states:

> Students will be prompted to consider the importance of thinking and talking about the feelings experienced by people who have lived through a significant bushfire event. They will explore some of the strategies people have used to cope and come to terms with their feelings after a traumatic bushfire event (VCAA, 2016c).

Providing opportunities for students to express and discuss feelings related to events and places helps foreground emotional engagements in learning experiences, and, as Golubchikov argues, might trigger skills for "potentially a more responsible and ethical operation of knowledge" (2015, p. 144).

Another possibility for focused attention on an affective response to field experience is apparent in the Docklands excursion (Table 1, No. vi). Concepts of sustainability have been cleverly incorporated into the change over time focus of this fieldwork and the worksheet activities would be effective in directing students' attention to the application of sustainable design principles, for example, through a visit to the National Australia Bank (NAB) building. The worksheet seeks responses that focus on the objective, technical merits of sustainability, for example, how the NAB building rates in relation to heating, cooling, waste, and so forth. Such activities are important but the fieldwork could also incorporate a more affective dimension by inviting students to consider the aesthetic qualities of, or students' emotional response to, the building design. The instrumental approach allows students to record measurable outcomes which clearly indicate their understanding of geographical concepts. However, when this is the only focus of the fieldwork, students don't have the opportunity to engage with what Golubchikov would characterise as critical responses which incorporates affective learning.

Limitations

Clearly, given the small number of fieldwork examples, confined to one Australian state, and the limitations of content analysis described above, care must be taken interpreting these results. It is emphasised that written descriptions of fieldwork can provide only a partial representation of experiential learning events. What the articles do not portray are the serendipitous teaching moments afforded by being in a place and/or the conversations and reflections that occur post-trip. I should also point out that, while there may not be a deliberate attempt to seek an emotional response, affect and sensory engagement are, of course, always present in a fieldtrip as they are in everyday life. Students participating in these experiences may have experienced transformative outcomes.

Another limitation of my analysis is the use of typologies to compartmentalise fieldwork. In practice, the categories are rarely discrete and the fieldwork examples in this study seldom completely comply with Job, Day, and Smyth's (1999) descriptions of each category. For example, the fieldwork that I describe as discovery learning (Table 1, No. v) is not "wholly open-ended" as Job, Day, and Smyth (p. 16) define, but it does incorporate some elements of

discovery learning in that the teacher assumes the role of "animateur, allowing the group to follow its own route through the landscape" and encourages "self-confidence and self-motivation by putting students in control of their learning" (p. 14). As mentioned above, there are also some commonalities between what teachers describe as inquiry-based fieldwork and Job, Day, and Smyth's description of hypothesis testing.

The scope of this paper has not permitted a close examination of the triadic relations of experiential, affective and critical learning as outlined by Golubchikov (2015). Analysis has focused on the provision of opportunities for embodied engagement with, and affective response to, field sites. However, some preliminary analysis suggests that the critical component of the triad is also not well represented in the sample. While most fieldwork sought to study interactions between humans and the natural world, there appears to be little explicit opportunity (at least on location) for "students to question why the world is the way it is, and reflect on their relationships with and responsibilities for that world" in order "to shape change for a socially just and sustainable future" (ACARA, 2016h). The interdependencies of critical and affective domains demand closer scrutiny and will be the focus of a forthcoming paper.

Discussion and Conclusion

Each of the fieldwork examples in this study provide sound opportunities for the acquisition of important intellectual knowledge and skills in geography. However, the approaches to fieldwork, unsurprisingly, don't reflect recent shifts in geographical thinking indicated in the literature. The discourse of geography fieldwork in Australia claims that there has been a movement away from traditional, teacher-centred approaches towards student-centered, inquiry-driven experiences that actively engage the senses. The sample examined in this study suggests there is a rhetoric-reality gap. Geography education in schools, it seems, has not yet challenged "those assumptions and practices whose histories have privileged language over sensation, objects of experience over subjects of experience, the rational over the affective, and knowledge as a tool for prediction and control over learning as play and pleasure" (Ellsworth, 2005, p. 2).

I argue that a fresh perspective on the experience of fieldwork is needed to foreground the importance of the body, emotion, and subjectivity in making sense of our world. Geography is in a uniquely privileged position in that experiencing the world firsthand is an accepted part of geography practice (at least in secondary geography education). However, transporting *in-side* pedagogies based around structure, prediction and control to the outside classrooms thwart opportunities for creativity, autonomy, curiosity, and a more embodied engagement with social and physical environments. I support Nairn's contention that we could do well to de-emphasise the visual "so that all senses might be relied on in the process of gaining geographical knowledge" (Nairn, 1999, p. 281). As a geographer, who later qualified as an outdoor educator, I believe adventure and play are also powerful learning tools and there is nothing quite like experiencing the embodied sensation of natural processes at work. Such experiences might include, for example, having your canoe *deposited* on a sandbar on the inside bend of a river, feeling the energy of waves as your surfboard is taken, or sensing topography through your body while orienteering. Following Phillips (2012, p. 84), I believe, "fieldwork can bring excitement and enchantment, independence and responsibility to learning experiences and cultivate a sense of wonder and adventure". However, this heightened engagement is more difficult to achieve through transmissive modes of teaching where students trail behind the teacher, 'fill in the blanks' on their worksheets and passively absorb pre-determined knowledge.

Of course, not everyone has access to the skills or training required to safely facilitate adventurous field activities (like canoeing, surfing and bushwalking) or the desire or opportunity (given the competing time and curriculum demands) for extended periods in outdoor environments. However, there are other ways of being adventurous, and inciting affective responses to places might simply require a reframing of current fieldwork sites and activities. As Golubchikov (2015) states:

> The sites and places that are (planned to be) visited, whether "mundane" or "extraordinary", can be thought through their possible registry in the affective domain including, for example, how they can invoke or provoke particular feelings and emotions (i.e. surprise, compassion, fear and prejudices) and sensitivities (i.e. being in place or out of place, inclusion or exclusion, aesthetic or disharmony, comfort or discomfort) and, more importantly, how these affective connections can matter for critical imaginaries. (p. 155)

We might, for example, re-think urban fieldwork (such as the VCE Melbourne fieldtrip examples in this study) in ways that resist the temptation to rely on formulaic questions, pre-specified stops or traditional "disembodied" activities such as "surveying landuse in an urban area"

(Nairn, 1996, p. 89). We might, instead, facilitate a Melbourne-based field experience through a sensory approach that explicitly seeks to provoke particular feelings, emotions and sensitivities. This might take the form of a study of change over time incorporating diverse, current and emergent uses of Melbourne's laneways. The challenge might be for small groups of students to generate their own inquiry question, then devise a suitable route through laneways and ways of recording that afford the most varied, sensory experiences and creative representations. Instead of the usual written field report, replete with annotated diagrams, tables and graphs, students might be encouraged to engage in media that helps them express and represent the smells, sights, sounds and feelings of the different laneways, for example: as lively sites for alfresco dining – as noisy venues for live music – as congested thoroughfares for pedestrians – as places for high end fashion boutiques or quirky retail stores – as *dark* places to sleep rough – as creative spaces (or places of protest/vandalism, depending on your disposition) for graffiti, stencilling, projections and/or muralling – as active spaces for parkour, freerunning or skateboarding – as hidden places for heroin injecting – as dangerous places for muggings and/or assault, or – as productive spaces for recycling, dumpster diving or guerrilla gardening. Students might pass by laneways (in the daylight) where they can imagine these things occurring (perhaps after dark). Following Golubchikov's (2015) call for critical, *engaged* fieldwork, an appropriate focus might be on the consideration of laneways, and who and what occupies them, in terms of "being in place or out of place, inclusion or exclusion, aesthetic or disharmony, comfort or discomfort" (p. 155). Such an emphasis might draw students' attention to bigger issues of social and spatial inequalities and offer experiences of being in relation to one's self, others and the world. Knowledge in such fieldwork pedagogy might be conceived, not as something "taught and used as a thing made" (Ellsworth, 2005, p. 1) but, as "knowledge in the making" and "continuously evolving through our understanding of the world and our bodies' experience of and participation in that world" (p. 1). This type of fieldwork takes students to less predictable places and spaces, and learning outcomes are less certain or verifiable; however, such experiences may also better represent the complexities and messiness of the real world (Golubchikov, 2015).

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Endnotes

1 Named after Travel Agent, Thomas Cook, who pioneered group tours in the mid-nineteenth century, a Cook's Tour fieldtrip is regarded as "the simplest and most traditional form of observational fieldwork" (Fuller & France, 2015, p. 159).

2 Note: There was one article on bushfire assessment that did not identify a year level but most likely targeted Years 9–10 level and I have included it in the secondary count.

3 Ngurra means both 'Country' and 'home' in Western Desert languages, see http://www.nma.gov.au/exhibitions/yiwarra_kuju/artworks/ngurra