Student voice in work integrated learning scholarship: a review of teacher education and geographical sciences


Published in:
Teaching and Learning Inquiry

Document Version:
Peer reviewed version

Queen's University Belfast - Research Portal:
Link to publication record in Queen's University Belfast Research Portal

Publisher rights
© 2017 The Authors. This is an open access article published under a Creative Commons Attribution License (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution and reproduction in any medium, provided the author and source are cited.

General rights
Copyright for the publications made accessible via the Queen's University Belfast Research Portal is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy
The Research Portal is Queen's institutional repository that provides access to Queen's research output. Every effort has been made to ensure that content in the Research Portal does not infringe any person's rights, or applicable UK laws. If you discover content in the Research Portal that you believe breaches copyright or violates any law, please contact openaccess@qub.ac.uk.
Student Voice in Work Integrated Learning Scholarship: A Review of Teacher Education and Geographical Sciences

ABSTRACT

Work integrated learning is an umbrella term that refers to the opportunities provided to university students to integrate knowledge of theory and practice as part of their degree program. As the role of students in higher education is evolving, we sought to develop our understanding of the role of students in the work integrated learning (WIL) space through exploring current literature on student voice. In this paper, we consider what has been reported about WIL in relation to student voice, how it has been represented, and how this has influenced practice. We undertook a systematic literature review for two different disciplines, one which represented an example of a professionally accredited undergraduate degree program (teacher education), and the other an example of a program with no professional accreditation (geographical sciences). The teacher education literature demonstrated more clearly the use of student voice to inform WIL within curriculum design. However, the geographical sciences literature did include examples of student voice being incorporated within the design of collaborative community-based forms of WIL. A role for students as researchers, who lead research and initiate curriculum change into WIL, was noticeably absent in both disciplinary sets of literature. The lack of evidence of the inclusion of students in the design, conduct, and analysis of WIL provides an invitation for SoTL scholars to redefine the role of students in this space.

KEYWORDS

student voice, work integrated learning, teacher education, geographical sciences, students as researchers

During the course of their degree program, many students have opportunities for real-world, practical experiences, commonly described using the umbrella term, work integrated learning (WIL) (Patrick, Peach, Pocknee, Webb, Fletcher, & Pretto, 2008).
key to defining WIL is to understand its purpose: “WIL is the intentional integration of theory and practice knowledge ... and may, or may not, include a placement in a workplace, or a community or civic arena” (Orrell, 2011, p. i). The location, duration, and assessment associated with each WIL experience vary across disciplines, institutions, and, within the context of a single degree program, across year levels and cohorts. These experiences form a core part of the higher education curriculum for a range of professionally accredited disciplines, such as teaching, nursing, allied health, and medicine. For these disciplines, WIL experiences include clinical placements, fieldwork, professional internships, service learning, and practicums, and such experiences enable students to apply their theoretical knowledge in a practice context (McKenna, Wray, & McCall, 2009; Rodger, Fitzgerald, Davila, Millar, & Allison, 2011). For other disciplines that are not professionally accredited, such as geography, history, politics, and business, WIL links theory and practice knowledge, and serves to increase students’ employment prospects upon graduation; for example, by building their workplace skills and fostering their network of potential employers (Guile & Griffiths, 2001; Sattler, 2011). To achieve its purpose, WIL requires collaboration from three key stakeholder groups: students, learning institutions (e.g., universities), and host organisations (e.g., industry partners) (Cooper, Orrell, & Bowden, 2010). Furthermore, designing effective WIL experiences can be achieved by considering “how learners can be active in maximising what is afforded them” (Billett, 2009, p. 836). And so, this paper is focused on the first and, arguably, the principal stakeholder group in WIL, students, and considers the presence and influence of their voice in WIL scholarship.

It is 10 years since Cook-Sather (2006b) argued that “‘student voice’, in its most profound and radical form, calls for a cultural shift that opens up spaces and minds not only to the sound but also to the presence and power of students” (p. 363). It would be difficult to argue that in the interim, thinking and practice have shifted sufficiently to radically redefine the role of students. How their ‘voice’ has been understood in practice has been shaped by particular configurations of different institutional contexts and associated cultures of teaching and learning (Holdsworth, 2000). However, for the most part ‘student voice’ has been integrated into educational change in terms of their evaluations of their higher education experiences. Feedback, input, and recommendations are solicited on an institutional basis in order to develop an evidence base that feeds into discussions and decisions taken around enhancement and change (Dunne & Zandstra, 2011). It is commonplace today for higher education institutions to formally draw students into these institutional decision-making processes, recognising not only the legitimacy of their perspectives and opinions, but also the importance of students having an active role in shaping educational practice (Holdsworth, 2000; Levin, 1994). More recently, however, research has emerged that queries how historically located structures and power relations mediate the ways in which ‘student voice’ is incorporated within these institutionally driven enhancement processes (Partridge & Sandover, 2010). It has been argued that offering students opportunities within the curriculum to become ‘apprentice researchers,’ investigating and reflecting on their own teaching and learning experience, has potential to improve further educational outcomes (Sandover, Partridge, Dunne, & Burkill, 2012). Engaging with students as collaborative partners in pedagogic...
knowledge acquisition and professional development, it has been argued, reinforces the idea of students as central to inquiry into the scholarship of teaching and learning (SoTL) (Cook-Sather, 2014; Felten, 2013; Healey, Flint, & Harrington, 2014) and offers the possibility of re-configuring ‘student voice’ as a more powerful source of agency and action (Kay, Dunne, & Hutchinson, 2010; Raelin, 2007).

There have been attempts to clarify the term ‘student voice’ through typologies that seek to define the role of students (e.g., Holdsworth, 2000; Lodge, 2005; Mitra, 2007). To frame our understanding of student voice for this paper, we have chosen Fielding’s (2004b) four-part typology:

- students as data source—“teacher commitment to pay attention to student voice speaking through the practical realities of work done and targets agreed” (p. 201)
- students as active respondents—“teacher willingness to move beyond the accumulation of passive data and a desire to hear what students have to say about their own experience in lessons and in school” (p. 201)
- students as co-researchers—“more of a partnership than the two previous modes and, whilst student and teacher roles are not equal, they are moving more strongly in an egalitarian direction” (p. 202)
- students as researchers—“partnership remains the dominant working motif, but here it is the voice of the student that comes to the fore and in a leadership or initiating [role], not just a responsive role” (p. 202)

In focusing on student voice, we sought to determine the role of students in WIL literature. Our initial review established that there is not yet a substantial body of research where students are engaged as co-researchers or researchers (Fielding, 2004b, p. 202) of their WIL experience. In summary, educational research is often conducted on, not with, students (Cook-Sather, 2007; Fine, Torre, Burns, & Payne, 2007; Thiessen, 2007). Our focus consequently changed to synthesising research that incorporates the student voice with students as data source or active respondents (Fielding, 2004b, p. 201). This was intended firstly to increase our understanding of the student voice in WIL, and secondly, to inform future WIL initiatives that involve students as co-researchers and researchers. The following three questions formed the basis of our inquiry:

1. What has the student voice literature revealed about students’ experience of WIL curriculum?
2. In what ways has the student voice been represented in literature on WIL research? (i.e., are there methods commonly used to collect data on student voice?)
3. How has the student voice contributed to developing WIL curriculum and research?

METHODOLOGY

We used a systematic literature review approach to identify, appraise, and synthesise research into students’ perspectives on WIL. Over the past 20 years, systematic review methodologies have emerged as computerised databases and search engines have
provided opportunities for identifying, mapping, and evaluating literature. Systematic reviews serve to synthesise a large body of research, and their results can even conflict with the findings of the original research (e.g., Mulrow, 1994). Approaches range from the configurative review more appropriate in qualitative research (Gough, Oliver, & Thomas, 2012) to those that follow a checklist for conducting and reporting the review (Moher, Liberati, Tetzlaff, Altman, & The Prisma Group, 2009).

Our systematic review focused on two disciplinary literatures: teacher education and geographical sciences. In selecting these particular disciplines, our intention was to compare and contrast research on a professionally accredited discipline (teacher education) with that of a discipline that is not professionally accredited (geographical sciences). For the former, how the curriculum (theoretical and practical) translates into professional practice has been a long-standing concern. For the latter, a discipline that incorporates elements of the humanities, social sciences, and science, the connection between the curriculum and ultimate career path is less clearly defined. Given these differences between the disciplines and their implications for what WIL means in practice, it was felt that insights could be generated that reflected the diversity of practice across the higher education landscape, and so be of wider interest within the SoTL community. Our methodology focused on three key elements:

1. Identifying the review question
2. Developing the search strategy
3. Appraising and analysing the articles

1. Identifying the review question
The research question emerged from a face-to-face discussion held at the International Writing Group workshop preceding the ISSOTL 2015 conference (see Matthews, Mercer-Mapstone, Marquis, McDonald, & Healey, 2015). The interdisciplinary nature of the discussion illuminated disciplinary differences regarding engagement in WIL in the curriculum. These differences included terminology (e.g., clinical placements, internships, field-based learning, etc.) and the educational role of WIL. Teacher education prepares its students for occupational roles, and this influences the delivery and assessment of WIL. In contrast, geographical sciences offers a wider range of models of WIL delivery and content, and the student experience tends to be less structured. These differences in practice and the terminology used create multiple perspectives from which to explore WIL. In addition, this study’s inclusion of a discipline whose degree pathway requires WIL for professional accreditation purposes (teacher education) and one that does not (geographical sciences) provided scope to generate broader insights into the range of opportunities commonly found within higher education and the different institutional contexts in which WIL experiences are offered.

An informal scoping review identified that many stakeholders, including employers, academic staff, and professional bodies, are involved in managing and evaluating WIL, (also see, Cooper et al., 2010), such that the students’ voice may not clearly be heard. We, therefore, determined that the objective of our review would be to capture the student voice as it is represented in the research literature. This would illuminate our understanding of WIL from an interdisciplinary perspective and contribute
to the current discourse on the role of the student as co-producer of knowledge within scholarship on teaching and learning in higher education (Cook-Sather, 2014; Felten, 2013; Healey et al., 2014).

2. Developing the search strategy
The search strategy was first developed independently by each discipline-based pair of authors, and then revised based on the strategies of the other discipline. The range of alternative terms for students, student voice, and WIL enabled the researchers to capture various combinations through the use of Boolean search terms (AND, OR, NOT). The searches for teacher education focused on articles with these search terms within the title, and geographical sciences within the text. This search process was repeated by both disciplines for each of the databases and then, to augment the initial search, separately for the specialist journals. For details, see Table 2 (Appendix 2—teacher education) and Table 3 (Appendix 3—geographical sciences).

3. Appraising and analysing the articles
Using the strategy outlined above, the teacher education search produced 29 articles that met the parameters. After reviewing the abstracts, irrelevant articles were excluded, and for particularly salient articles, the database’s ‘find similar results’ feature was applied, which when combined with the previous search, led to 24 articles being selected. After reading these articles, 10 were excluded as irrelevant or not well-designed, and so 14 articles were included in the review.

The range of parameters for geographical sciences was designed to capture diverse forms of pedagogic practice commonly framed within the discipline as WIL. Sixty-nine papers were identified, nine of which were omitted as they were not deemed sufficiently relevant (e.g., they focused on ‘employability’ in general) or were inaccessible due to source of publication (e.g., *Turkish Journal of Geographic Education*).

Across each of the disciplines, the authors appraised the studies in terms of the rationale for WIL, the terms used and their definitions, the research questions that informed the studies, the theoretical and methodological frameworks deployed, the context within which they were undertaken (disciplinary, institutional, geographical), their findings and, finally, how students were involved. This enabled each disciplinary team to identify and contextualise key debates, common features, and important differences that have emerged within each body of literature. A synthesis of findings for each of the disciplines is presented, followed by a discussion of the review as a whole.

SYNTHESIS OF FINDINGS
Teacher education review
Educator preparation programs are complex and based on a number of key aspects. The most recent teacher education reforms have addressed a wide range of issues, and WIL remains a key feature of calls for change. Student voice in WIL has played a significant role in the research responding to and shaping these calls for reform. For example, to develop principles for reforming teacher education programs, Korthagen,
Loughran, and Russell (2006) began with highlighting the importance of experience-based programs.

A systematic review of the literature on WIL in teacher education found no research studies in which the students were involved in the design, execution, and data analysis of research questions. Thematically, the literature that included student voice over the past ten years addresses student readiness for teaching, and perceptions of the relationships between students, instructors, and partners. Both quantitative (mostly surveys), and qualitative (e.g., phenomenological study) methods were used, with qualitative studies including a range of data types (e.g., in-depth interviews, field notes, and metaphor). There are, however, many studies that have responded to Clift and Brady’s (2005) call for research that incorporates student voice. Thematically, the literature that has included student voice addresses the impact of WIL learning on readiness for teaching and perceptions of the triad of teacher candidate-university supervisor-collaborating teacher.

Impact of WIL on readiness for teaching

Teachers and students have long claimed they learn more from WIL than they do from course work (Hollins & Guzman, 2005) and the impact of WIL on readiness for teaching is highly researched (Brown, Lee, & Collins, 2015). Many of the studies compare survey results from before and after WIL. Student perceptions of preparedness with regard to pedagogical content knowledge, preparation, instruction, promoting family involvement, and professionalism increased significantly in readiness for teaching. Students also showed significant increases in their confidence with regard to teaching skills, classroom management, assisting struggling students, and monitoring their own teaching (Goh, Wong, Choy, & Tan, 2009). De Baz and El-Weher (2008) examined concerns of students in the areas of self (personal survival), task (teacher-situations), and impact (pupil needs), and found that concerns related to self were the highest both pre- and post-WIL and did not change significantly, while concerns of task increased significantly, and the highest mean change related to impact. During WIL, students expressed difficulties with stress, weariness, and vulnerability, and positive feelings about gaining knowledge and skills and their sense of efficacy, flexibility, and spontaneity in their performance (Caires, Almeida, & Vieira, 2012); they also reported fatigue created by the time requirements of teaching and inadequacy at managing extreme student behaviour (Berridge & Goebel, 2013).

Perceptions of the traditional student teaching triad

With regard to the student teaching triad (student-university supervisor-collaborating teacher), studies revealed students in the traditional triad for 15 weeks reported higher mean scores on general knowledge and skills, multicultural perspective, reading, mathematics, and assessment than those in a year-long WIL who did not have a collaborating teacher in their classrooms (Clark, Byrnes, & Sudweeks, 2015). The same study reported that, at the end of their first year of teaching, traditional triad WIL students had higher mean scores in general knowledge and skills, multicultural perspective, and reading, while those in the non-traditional support placements had...
higher mean scores in mathematics and assessment. Students identified successful cooperating teachers as those who modelled good teaching, worked to create a positive relationship with their student teachers, provided teaching opportunities and support, and were persons of good character (Torrez & Krebs, 2012). Students gained greater benefit from supervisors who had content knowledge in their field of certification (Mudavanhu, 2015), and pedagogical supervisors and cooperating teachers were perceived to provide the most support (Smith & Lev-Ari, 2005). Students’ perceptions of supervisors as expressed through metaphor revealed positive behaviors such as guiding, developing, protecting, evaluating, and controlling, as well as negative behaviors such as frightening, criticizing, being ineffective, and acting inconsistently (Yildirim, 2013). Frustration with cooperating teachers occurred when they provided inadequate teaching opportunities, ineffective communication, poor classroom practices, and misconceptions about the student teacher’s role (Lu, 2013). Frustrations with university supervisors occurred when supervisors approached their role in a hierarchical rather than collegial manner, when their suggestions conflicted with the collaborating teachers, and when their feedback on teaching performance was delayed (Burns & Badiali, 2015).

Concluding reflection
This review reveals an increase in calls of WIL, particularly through fuller partnerships with local schools as a means of providing more frequent and extensive WIL. Overall, student voice indicated that WIL is one of the most formative experiences of their preparation to teach, in which they make significant gains in applying theory to practice in both the pedagogical and dispositional aspects of teaching; however, the types of gains are heavily mediated by the quality of the teacher candidate-university supervisor-collaborating teacher support system.

Geographical sciences review
Most of the papers identified within the geographical sciences literature addressed issues and experiences pertinent to undergraduate students. The majority of the papers (55) came from a single journal, the Journal of Geography in Higher Education, an English-language journal in its 40th year, with a reputation as a global forum for sharing research findings related to geographical sciences teaching and learning in higher education. It was not uncommon for papers to describe a singular WIL experience or program developed within the context of the author’s institution. The majority of these institutions were located either in the UK, USA, Canada, Australia, or New Zealand.

Mapping out the spaces and places of learning
The papers discuss a range of learning experiences and the institutional settings within which they are situated. These learning experiences are bound together by a disciplinary commitment to engaging with a world of difference and share an understanding of the relevance of what is taught in the classroom for everyday practice (Solem, Foote, & Monk, 2013), graduate employment (Arrowsmith, Bagoly-Simo, Finchum, Oda, & Pawson, 2011; Waddington, 2001), and citizenship (Yarwood, 2005). Fieldwork (Kent, Gilbertson, & Hunt, 1997) and capstone projects (Clark, 1995) are long
established practices, increasingly complemented since the mid-1990s by various forms of service learning (Brail, 2013; Dorsey, 2001), internships/placements (Eden, 2014) and problem-based simulations (Cornelius, Medychkyj-Scott, Forrest, Williams, & Mackaness, 2008). Drivers for the expansion of WIL within the curriculum include expanding vocational opportunities in geographic information systems, remote sensing and geotechnology, institutional pressures to be seen to produce work-ready graduates and forge community partnerships, and departmental initiatives to enhance levels of student engagement across an increasingly diverse student body.

Assessing the value of WIL through the student voice

The majority of papers addressed WIL experiences of service-learning, community-based learning, capstone projects, and fieldwork. Within this, much of the early literature on WIL largely assumed the pedagogic value of fieldwork and capstone projects as a given, and instead focused on the efficacy of integrating forms of work experience within the curriculum, the challenges staff encountered in negotiating associated institutional hurdles, and graduate employment outcomes (e.g., Hogg, 1998; Jones, Healey, & Matthews, 1995; Lemon 1979; Shepherd, 1995; 1998a; 1998b). However, over the past fifteen years, studies have begun to broaden our understanding of these forms of learning experiences, beyond quantifiable employment outcomes.

Typically, this research has drawn upon formal module evaluations undertaken for quality assurance purposes, questionnaire surveys, analyses of online discussion boards, and insights generated from reflective journals (e.g., Marvell, Simm, Schauf, & Harper, 2013; Mundkur & Ellickson, 2012; Pawson & Teather, 2002; Spalding, 2013). Most papers relied heavily upon the researcher’s voice in filtering and interpreting data on students’ impressions, performance, and appraisals of these sorts of learning experiences. One exception was Marvell et al. (2013), a paper co-authored with students about field experiences they developed collaboratively. Another was Pain, Finn, and Ngobe (2013), a paper on community-based learning practices, which included a student and a community partner as co-authors. Gedye, Fender, and Chalkey (2004) is also notable for asking graduates to rate the usefulness of coursework in developing skills relevant to the labour market. And finally, Stokes, Magnier, and Weaver’s (2011) phenomenographic approach captured significant differences in how students and staff conceptualise and experience fieldwork.

Apart from these exceptions, researchers’ findings often rely upon selected quotations from study participants to substantiate wider points. These quotations typically highlight students’ appreciation of: “hands on experience” (Pawson, 2016, p. 24); engaging with “the real world” (Fuller, Edmondson, France, Higgitt, & Ratinen, 2006, p. 96); the process of discovering that issues are “more complex than I imagined” (Miller, 2013, p. 53); the opportunity to be “able to use what you’ve actually learnt” and scope to add “something for the CV” (Pain et al., 2013, p. 35). These ways of framing and articulating their experiences signify not only cognitive gains (geographic knowledge and skill development), but also important utilitarian skills and experience (prized in the workplace) and affective experiences (personal self-awareness and emotional maturity).
Articulating the development of a professional ethos and acumen

For example, Marvell et al. (2013) found that students particularly valued the experience they gained in managing group dynamics and decision-making in a collaborative context. Pawson (2016, p. 24) noted that students valued learning “not to take criticisms personally,” as well as realising “the importance of listening” and understanding the needs or aspirations of a partner. These sorts of workplace competencies and graduate attributes, Pain et al. (2013) report, furnished students with “neat bite-sized accounts to serve up to job interviewers” (p. 36), addressing questions such as the students’ experience with collaborative work, leadership roles, and dealing with challenges. Spalding (2013) and Eden (2014), on the other hand, found that students’ accounts emphasised what they learnt in terms of affective gains, through the emotional investment required to negotiate novel and challenging situations. According to Pain et al. (2013) this form of engagement draws upon a range of competencies and graduate attributes that are often not directly assessed. For some students this sort of experience is thrilling, and yet for others too challenging, some preferring to remain emotionally detached and to focus on getting the work done.

The main tensions in the literature centre on where and what type of knowledge is created. This debate is occurring across the discipline (see Richardson & Solis, 2004). Fieldwork has traditionally been considered a mainstay of geographical sciences education (e.g., QAA, 2014), and one could argue that community-based learning and service-learning are a natural outgrowth of fieldwork with a special emphasis on community engagement (Bednarz, Chalkey, Fletcher, Hay, Le Heron, Mohan, & Trafford 2008). However, the delivery of field-based modules that offer authentic opportunities to apply geographic knowledge as a form of professional practice is resource-intensive and challenging to scale up to large cohorts of students (see Huang, 2011). Given this, fieldwork is valued more for the ways it can support the development of a professional ethos and acumen by contextualizing learning, integrating knowledge taught in the classroom with the application of soft skills and problem-solving techniques. This said, some have debated whether field activities challenge or reinforce students’ preconceived notions of the world, particularly in areas of global North-South relations or social justice issues (Diprose, 2012; Hope, 2009; Miller, 2013; Mohan, 1995; Nairn, 2005; Pain et al., 2013).

Concluding reflection

Within the geographical sciences literature, the majority of studies report on initiatives within the researcher’s own institution, drawing upon module evaluations, reflective assessments and, occasionally, surveys. Emphasis has been on evidencing outcomes (cognitive, utilitarian, and affective). Much less common is the inclusion of students as partners within the pedagogic research, consideration of students’ prior expectations of WIL, and clarity on how their voice could influence existing practice (Moore-Cherry, Healey, Nicholson, & Andrews, 2016).

DISCUSSION
A range of initiatives have gathered pace, striving to redefine the role of students in educational research and reform (Cook-Sather, 2006a; 2006b). For students, WIL enables the integration of their theory and practice knowledge (Orrell, 2011; Rosaen & Florio-Ruane, 2008), but as yet, much of the scholarship on WIL does not advocate a role for students in initiating or leading the redesign of WIL experiences (a role Fielding [2004b] termed ‘researchers’).

The teacher education literature has been animated by a concern to understand how and to what degree investments in WIL initiatives impact upon the readiness of students for professional practice. Student voice has played an important role in reforming processes of professional development and accreditation within teacher education. However, notwithstanding the growth of career opportunities within GIS (Geographical Information Systems, software applications for capturing, modelling and displaying data related to positions on the Earth’s surface) for the geographical sciences, WIL initiatives have instead tended to be discussed in terms of their impact on prospects for securing a graduate career and the development of a sense of citizenship. As such, the most common forms of WIL in geographical sciences (fieldwork and community-based learning) integrate theoretical knowledge with practical knowledge in terms of a form of praxis that can best be described as engaged scholarship, through which the development of a range of general professional competencies is supported. This differs, qualitatively, from the sorts of specific professional competencies required of student teachers as they negotiate the boundaries between the space of the classroom and the realm of professional praxis.

The systematic reviews have documented a plethora of ways in which research has attempted to capture the student voice. Not surprisingly, this is most developed within the teacher education literature, within which a greater range of research methods has been used to capture student experiences of WIL. These typically include questionnaire surveys and the analysis of reflective forms of assessment, and extend within teacher education to include focus groups, in-depth interviews and story webs. This said, across both sets of literature, few examples were found of studies in which students have been involved in the design, implementation, and analysis of research on forms of WIL. Curiously, the exceptions to this were found within the geographical sciences literature, where two pieces of research were created through forging a partnership between the instructor, students, and communities (Marvell et al., 2013; Pain et al., 2013). These types of polyvocal accounts are the product of initiatives that explicitly draw upon pedagogies of empowerment, transformation, critical thinking, and social participation (Dewey, 1938; Freire, 1972; Kindon & Elwood, 2009). They also build upon longer standing radical critiques within the discipline on what geographical sciences ought to be, bringing “knowledge, emotion and action together” (Monk, 2001, p. 391), and dovetail with more recent sector-wide initiatives for higher education institutions to be seen to be engaged (Watson, Hollister, Stroud, & Babcock, 2013) or edgeless (Bradwell, 2009). However, these two articles, as with most reviewed for geographical sciences, fail to adequately explain and provide evidence on how the student voice has influenced WIL practice. Only within teacher education is there a growing body of literature on evidencing how student voice has been incorporated within efforts to reform WIL, and in particular to rethink the
nature of the ‘student-instructor-teacher partner’ triad within the design and delivery of WIL.

This review has revealed there is scope to redefine the role of students in WIL scholarship, and most notably, to expand the contribution of students to WIL research and curriculum design. Achieving this will require that we change how we think about teaching and learning, and avail ourselves of opportunities to transform the institutional systems and processes that constrain practice. A deeper engagement with student voice might be associated with “major shifts on the part of teachers, students, and researchers in relationships and in ways of thinking and feeling about the issues of knowledge, language, power, and self” (Oldfather, 1995, p. 87). Fielding (2004a) asserts that “there are no spaces, physical or metaphorical, where staff and students meet one another as equals, as genuine partners in the shared undertaking of making meaning of their work together” (p. 309). Therefore, efforts to integrate student voice, “however committed they may be, will not of themselves achieve their aspirations unless a series of conditions are met that provide the organisational structures and cultures to make their desired intentions a living reality” (Fielding, 2004b, p. 202). In addition to these not inconsequential barriers, Lodge (2005) suggests that in working with student voice we should be clear about the role of students and the purposes for which their participation is sought. For example, a compliance model would selectively use student feedback to serve institutional agendas (Lodge, 2005, p. 133), while a dialogue-based model would engage students as active participants. In addition to purpose, Freeman (2016) suggests we consider our roles and ideologies to illuminate and navigate the tensions and complexities associated with student voice in higher education.

CONCLUSION

Our systematic literature reviews for teacher education and geographical sciences suggest that traditionally the student voice within SoTL research on WIL has been presented using analyses of surveys, interviews, and focus group data. The ways in which these methods have been deployed rarely allowed for an authentic student voice to be presented (Partridge & Sandover, 2010). Indeed, how those voices that are represented come to inform practice is often unclear. Fortunately, wider scholarship on teaching and learning has begun to address this, recognising that students can be more than merely consumers of education (Neary, 2008), and can engage in SoTL as co-researchers, change agents, and activists (Dunne & Zandstra, 2011; NUS, 2012; Flint & Oxley, 2009; Healey et al., 2014). A growing body of literature within teacher education highlights what this may mean for curriculum design and forms of WIL in particular.

Redefining the role of students may lead us to discover how WIL can benefit university students across a number of dimensions - their learning, their socio-cultural understanding, and their skill development - by providing them with experiences that will help them assess future career intentions (Roberts, Daly, Kumar, Perkins, Richards, & Garne, 2012). Such an approach will ameliorate the concern within the existing literature that students are simply providing judgement on their own ability to integrate theoretical and practical knowledge (Conrad, Sketris, & Langille-Ingram, 2013; Cooper et al., 2010; Givelber, Baker, McDevitt, & Miliano, 1995).
For those seeking to redefine the role of students, work by Ku, Yuan-Tsang, and Liu (2009) provides an example of a student as researcher relationship that actively sought the inclusion of the ‘student voice.’ They asked students to reflect on their experience and take a more holistic approach by interweaving their knowledge with a need to respond to the varied situations they faced when sent on rural placements. Students were encouraged to offer their opinions and influence decisions, and the approach empowered students to be active and critical participants in not only their own learning, but the social issues facing the rural community in which they were placed (Ku et al., 2009). This study provides evidence that students can meaningfully contribute as practitioners and researchers, and invites us to reconsider how we can involve our own students in the scholarship of WIL practice and research.

ACKNOWLEDGEMENTS

This paper was conceived, developed, and written through the International Society for the Scholarship of Teaching and Learning’s (ISSoTL) International Collaborative Writing Group initiative. This initiative involved a series of Skype meetings, many emails, and a face-to-face workshop prior to the 2015 ISSoTL Conference in Melbourne, Australia. We appreciate the support of Mick Healey and Kelly Matthews as leaders, mentors, and facilitators throughout the writing process. We thank Mick, Kelly, and the authors of the other papers in this special issue of Teaching and Learning Inquiry for their helpful comments on earlier drafts of this paper.

*Dr. Kate Thomson is a lecturer in the Faculty of Health Sciences at the University of Sydney. Kate led her co-authors through a collaborative writing process to develop this paper.*

*Robyn da Silva is an undergraduate psychology honours student at Flinders University, Australia.*

*Dr. Peter Draper teaches nursing as the University of Hull, UK. Peter is a UK National Teaching Fellow.*

*Dr. Anne Gilmore is currently a consultant in heritage and historical research, prior to this was as the Academic policy and development consultant for the Faculty of Health and Behavioural Sciences at the University of Queensland, Australia.*

*Dr. Niall Majury is a lecturer in the School of Natural and Built Environment at Queen’s University Belfast. An economic geographer, he has published on the development of on-screen trading technologies, the governance of global financial markets, and the cultural economy of homeownership.*

*Dr. Kevin O’Connor is an Assistant Professor in the Department of Education at Mount Royal University, Canada.*

*Dr. Anete Vásquez is an Associate Professor of Curriculum and Instruction at Kennesaw State University in Georgia. She teaches courses in English education and research.*
Dr. Jacqueline Waite is a post-doctoral fellow and practicing geographer currently hosted by the US Environmental Protection Agency through the Oak Ridge Institute for Science and Education’s (ORISE) research participation program.

REFERENCES


Appendix 1. Search terms used for review of student voice

Table 1. Search terms (text words) for each of the three concepts (gs = geographical sciences search, te=teacher education search)

<table>
<thead>
<tr>
<th>CONCEPT 1: STUDENTS</th>
<th>CONCEPT 2: STUDENT VOICE</th>
<th>CONCEPT 3: WORK INTEGRATED LEARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEXT WORDS</td>
<td></td>
<td>AND</td>
</tr>
<tr>
<td>Pre-service teachers</td>
<td>Attitude gs,te</td>
<td>Action research gs</td>
</tr>
<tr>
<td>Student gs</td>
<td>Experience gs,te</td>
<td>Applied research gs</td>
</tr>
<tr>
<td>Student teacher te</td>
<td>Evaluation gs,te</td>
<td>Capstone project gs</td>
</tr>
<tr>
<td>Teacher candidate te</td>
<td>Perception gs,te</td>
<td>Civic engagement gs</td>
</tr>
<tr>
<td>Students as change agents gs,te</td>
<td>Clinical based practice te</td>
<td></td>
</tr>
<tr>
<td>Students as collaborators gs,te</td>
<td>Clinical practice te</td>
<td></td>
</tr>
<tr>
<td>Student interests gs,te</td>
<td>Co-op program gs</td>
<td></td>
</tr>
<tr>
<td>Student needs gs,te</td>
<td>Cooperative education gs</td>
<td></td>
</tr>
<tr>
<td>Students as partners gs,te</td>
<td>Dissertation gs</td>
<td></td>
</tr>
<tr>
<td>Student voice gs,te</td>
<td>Employer based gs</td>
<td></td>
</tr>
<tr>
<td>Employer informed gs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Externship gs</td>
<td>Field based learning gs</td>
<td></td>
</tr>
<tr>
<td>Field course gs</td>
<td>Fieldwork gs,te</td>
<td></td>
</tr>
<tr>
<td>Internship gs,te</td>
<td>Participatory research gs</td>
<td></td>
</tr>
<tr>
<td>Placement gs,te</td>
<td>Practice-based learning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>gs,te</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td>Practicum te</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td>Pre-service training te</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td>Service learning gs</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td>Work-based learning gs</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td>Work-integrated learning gs,te</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td>Work-related learning gs</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 2: Review of student voice in teacher education WIL

Table 2. Summary of teacher education search

<table>
<thead>
<tr>
<th>Databases</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EBSCO, ERIC, JSTOR Arts and Sciences, ProQuest, ScienceDirect, Web of Science</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specialist discipline journals</th>
<th></th>
</tr>
</thead>
</table>

| Identification: One text word from each of three concepts in article title                        | n=29                                                             |
| Abstracts screened and “Find similar results” feature applied                                   | n=24                                                             |
| Full articles assessed for eligibility. Excluded articles if irrelevant, or not well-designed    | n=14                                                             |

Teacher education review

Appendix 3: Review of student voice in geographical sciences WIL

Table 3. Summary of geographical sciences search

<table>
<thead>
<tr>
<th>Databases</th>
<th>n=69</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBSCO, IBSS, JSTOR Arts and Sciences, ScienceDirect, SCOPUS, Web of Science</td>
<td></td>
</tr>
</tbody>
</table>

| Specialist discipline journals                                                                 |
|----------------------------------------------------------------------------------------------|------|
| *Journal of Geography in Higher Education, Journal of Geography, Area, Geography Compass, International Research on Geographical and Environmental Education, Turkish Journal of Geographic Education* |

<table>
<thead>
<tr>
<th>Identification: One text word from each of three concepts in article body</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=69</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Full articles assessed for eligibility. Excluded articles if irrelevant or inaccessible</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=60</td>
</tr>
</tbody>
</table>

Geographical sciences review


Copyright for the content of articles published in *Teaching & Learning Inquiry* resides with the authors, and copyright for the publication layout resides with the journal. These copyright holders have agreed that this article should be available on open access under a Creative Commons Attribution License 4.0 International (https://creativecommons.org/licenses/by/4.0). The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited, and to cite *Teaching & Learning Inquiry* as the original place of publication. Readers are free to share these materials—as long as appropriate credit is given, a link to the license is provided, and any changes are indicated.