Literature Review on the Use of Action Research in Higher Education

Abstract

This literature review considers the use of action research in higher education. It specifically looks at two areas of higher education activity. The first concerns academic teaching practice and includes a discussion of research and pedagogy practice, and staff development. The second considers student engagement. In both these core features of higher education, action research has proved to be a central approach to the investigation, reflection and improvement of practice. Each of these main foci includes a discussion of the limitations of the literature. The review illustrates the extent and range of uses to have benefited from an action research approach.

Keywords: higher education; action research, literature review; reflective practice

Literature Review on the Use of Action Research in Higher Education

The centrality of students as fee paying customerts, besides based on the value of their fees, has focused UK Government policy in the higher education sector on the importance of the quality of teaching and rates of retention. On 1 July 2015, Jo Johnson, UK Minster for Higher Education, confirmed the second of his party's election pledges concerning teaching in higher education:

> secondly, delivering a teaching excellence framework that creates incentives for universities to devote as much attention to the quality of teaching as fee-paying students and prospective employers have a right to expect. (Johnson 2015)

The justification for such a scheme is as follows:

> to meet students' high expectations of their university years and to deliver the skills our economy needs, we need a renewed focus on teaching. (ibid.)

A process was put in motion that seeks to enact changes to put teaching at the heart of higher education policy. The extrinsic value of teaching, or its value for money, is thus established as a metric of the level of skill, inferred from its calculative value: as a professional activity – as a vocation – higher education is undermined. Whether this exposes the essence of higher education provision is contentious, but the rebalance of emphasis from research to teaching in our mass participation higher education system clearly has intrinsic merit, and certainly possesses political leverage. Amid the development of lecturers' capability to teach and facilitate learning is the enhancement of pedagogical practice through reflection and research into practice (Gibbs, Angelides and Michaelides 2004). In this context, the importance of action research (AR) as a method of revelation, instruction and improvement, and as the realisation of technical skill and facilitation of learning, is hard to overemphasise. Informed practice removes the consumeristic notion of lecturers as emotional labourers, intent on satisfying students' consumerist desires, and balances the edifying mission of higher education institutions.

This literature review is undertaken to contribute to this aim. It attempts to reflect AR from a number of perspectives and to consider its implications and limitations in regard to generating theory and enhancing teaching practice in UK higher education.

The review is a narrative assessment of the current state of knowledge and is offered as a guide for others to explore and be informed about the array of literature in this area, although we highlight where there seems insufficient literature and suggest it might lead to research. The relevant studies were identified by searching the higher education pedagogy journals via in-house databases, including Summon. In order to ensure no relevant studies were missed, the search terms

were broad: higher education; pedagogy; teaching; staff development; student experience; learning; and AR. Only published studies were investigated, and the search was restricted to those since 2005 to make the review current and manageable. Each paper was examined in detail by the researchers, who were split into four teams. An article was included if its use of AR was central to the theme or comprised the main topic.

Our initial review of the range of relevant available academic literature revealed a cluster in two areas influencing educational practice: pedagogical research as a field of study; and teaching in the transmission and co-production of knowledge with students. The literature on the student experience itself provided insight into how teaching influenced students' experience of learning. Whilst in practice some of the issues overlapped, this provided advantages of identifying issues common to all four domains and highlighting specific contextual differences.

Action research and pedagogic research

Social justice and emancipation

The relationship between AR and the development of pedagogic research in higher education was revealed as a primary research methodology, linking to reflective practice. Moreover, given its theoretical and political roots, AR is frequently called upon to explore issues relating to critical pedagogy and social justice. This is seen in its use to promote large-scale social change (Lorenzetti and Walsh 2014; Miskovic and Hoop 2006; Thomas 2000). Indeed, Kemmis (2001) expects AR to operate far beyond the confines of any individual practitioner–researcher and to change the practice setting radically to challenge injustice. In the context of the development of African and South African higher education, Weber (2011) argues passionately that AR needs to be linked to community participation to explore the extent to which the pursuit of scholarship in universities contributes to the legitimation or eradication of unequal social and economic power relations. Smith et al. explore the sense of being 'exposed and rudderless' (2010: 407) experienced by some university lecturers when navigating the macro- and micro-politics of working with community co-researchers on projects to promote social change. Greenwood (2012) contextualises the practice and teaching of AR within the dominant structures organising contemporary higher education, namely neo-liberalism and academic Taylorism (2012: 116). He positions AR as going against the grain in this context of disciplinary silos although, paradoxically, he argues that it offers important opportunities to produce socially meaningful research. In the UK, Millican (2014) seeks to use AR to explore how students experience contemporary higher education in a new economic and social era.

Institutional development

There is an increasing trend to investigate AR at an institutional level, breaking down the demarcations between traditional scholarship, research and administration/organisation (Avdjieva 2005; Donche and Van Petergem 2004; Hubball and Burt 2006; Kur et al. 2008; Levin and Martin 2007; Lucas 2007; Paulsen 2001; Sankaren et al. 2007). Much of this reflection is based on Schön's (1995) and Boyer's (1990) contention that a new epistemology of practice in the form of AR is required to realise the latter's vision for a new paradigm of scholarship, which includes research, teaching, application and integration (Walton 2011). The institutional boundary between teaching and research is considerably blurred through AR, but it requires the establishment's support to enhance this interconnectivity. Tormey et al. (2008) bring together AR pedagogic case studies to look at the role of AR in narrowing this gap, and agree with Walton (2011), Hubball and Burt (2006), and Sankaren et al. (2007) that at the institutional level the barrier between the two mindsets needs to be brought down.

Change management and the emancipatory potential of AR are foregrounded in a study by Hodgson, May and Marks-Maran on the need for development in supportive learning environments to facilitate widening participation (2008). Utilising a participant AR cycle, directed by a progressive institutional learning and teaching strategy, faculty members and the student body are provided with the opportunity to contribute toward the accomplishment of institutional change from the 'middle out'.

Other authors highlight barriers to reflection and action such as procrastination and resistance, and Garcia and Roblin (2008), and Scherman and du Toit (2008) seem to imply that changes or improvement to practice are made through academics' reflections on teaching approaches, as well as the obstacles faced and how they are navigated. Harland and Staniforth (2000) find that the hurdles that prevent the academics from engaging include their perception that research is a time-consuming activity and that they themselves have already completed their professional learning (2000). In this context the barriers to staff development, therefore, may be constructed as much internally as externally. Bianchini, Maxwell and Dovey (2014) also point out that there is considerable resistance to change, in some contexts, as oppressive forces are predominant. Therefore, what is under debate is the extent to which this autonomy and innovation at the more socially transformational level is pro-actively encouraged in these different contexts.

Curriculum development

Action research approaches have frequently been explored as a means of identifying strategies for curriculum development at an institutional level. Aiming to enhance widening participation, one institution carried out a project that sought to develop a framework to afford faculty members the insight necessary to inform effective curriculum design (Millwood and Powell 2011). Extended AR, comprising several iterations, informed Trevitt's (2005) project to refine academic identity, resulting in the enactment of enhanced curriculum development strategies. The implementation of sustainability issues within and across curricula is an issue that AR has been used to address, in the main by processes leading inevitably toward negotiation as an intervention (Benn and Dunphy 2009; Junyent and de Ciurana 2008).

Pedagogies

In a more confined arena, AR is used to evaluate attempts to introduce critical pedagogies in teaching into higher education settings (Baptist and Nassar 2009; Guy Wamba 2011; Humphries-Mardirosian and Irvine Belson 2009; Taylor and Pettit 2007). Whilst many of these studies contribute interesting discussions of innovative teaching and theoretically rooted pedagogies, there is considerably more emphasis on the exploration of critical pedagogy per se and how it links with the choice of AR as an emancipatory research method. *How* AR is utilised as a research method – how data is collected and analysed, positionality and bias negotiated, and how the AR spiral/cycle is enacted, and so on – often goes unexplored, leaving open any questions on rigour and reliability of the findings. Action research often appears to be used as a tool to encourage critical reflection rather than to be reflexive (Kinsler 2010), and to increase professional efficacy in such instances rather than to serve as a research method.

Teacher training

A particular area examined in pedagogical research is the use of AR in teacher training and graduate programmes of study that concentrate on the teaching and utilisation of an AR dissertation (Adler 2011; Cornelissen and Van der Berg 2013; Furtado and Anderson 2012; Halai 2011; Moate and Ruohotie-Lyhty 2014; Simms 2013; Vassilis 2009; Zambo 2011). These types of programmes using AR are explored from both the learners' and the teachers' perspective (Katsarou and Tsafos 2013; Price 2001; Price and Valli 2005). One study of a teacher training programme adopts AR as a democratic participatory approach to mentorship in a virtual and distributed situation (Gordon and Edwards 2012), whilst another focusses upon the incorporation of culturally relevant pedagogy (CRP) into curricula to address emancipatory requirements (Hungerford-Kresser, Wiggins and Amaro-Jimenez 2014). However, AR in the context of teacher education and individual teaching practice is

predominantly used in a technical and practical manner rather than in an emancipatory way, often focusing on first-person practitioner research aimed at improving individual teaching practice (Burchell and Dyson 2005; Chesney and Marcangelo 2010; Getz 2009; Gravett 2004; Greenbank 2007; Orland-Barak 2004). Kemmis (2006) is overtly critical of the development of the work since his and Carr's seminal paper of 1986 (Carr and Kemmis, 1986), stating five distinctive ways in which the development of AR has lost its 'critical edge, especially in the bigger sense of social or educational critique aimed at transformation of the way things are' (2006: 459). Indeed, while some argue that there is evidence of a domestication of AR, others debate the positioning of AR and its connection with social and institutional change (Jacobs and Murray 2010; Pilkington 2009; Smith and Fernie 2010). Furthermore, some have moved beyond first-person research to focus explicitly on collaborative inquiry, for example Harland and Staniforth's (2000), and Farrell et al.'s (2012) work on collaborative self-study and AR.

Development of other professions

Action research and participatory action research appear in a range of disciplinary and profession literature beyond the field of academia and teaching and learning. In the main, this is in keeping with the philosophy of action research, which revolves around enquiry and mobilisation of action within a particular setting. This varies and, on review, reveals some interesting parallels. The breadth of research continues with the dual intention of benefiting the research participants, who are often service users, and providing professional development for practitioners. The outcomes of such studies vary and include the evaluation of service user involvement, the development of care assessment and planning tools (Walsh et al. 2014), and explanatory models (Klein et al. 2014). Benefits cited include enabling users' voice to contribute to and influence practice, for example that of older people (Walsh et al. 2014), also empowering practitioners to learn 'research' practice (Ericson-Lidman and Strandberg 2013 Fieldhouse and Onyett 2012). We do not develop this further here, as the impact of action research at the interface of professional training and university professional development produces a literature too rich for this specific review.

Staff development

Within the context of institutional requirements, questions range from investigation into the effectiveness of an institution's current CPD (continuing professional development) programme (Barnes and Bennett 2001), the identification and evaluation of development that necessarily accompanies institutional growth and change (Johnson 2010), and the examination of collaboration with staff in re-writing the CPD programme (Brown, Rich and Holtham 2014). For Herbert and Rainford (2014), professional development is something that evolves as a result of insight drawn

from undertaking the AR in terms of curriculum knowledge and response to situations that emerge during research.

Action research blurs the distinction between research and practice (Wakefield and Adie 2012), between researcher and object, and between disciplinary differences (Garcia and Roblin 2008). Through these processes there is the opportunity to question teaching practice and to open new possibilities, so that established leadership and power structures are explored and challenged (Bianchini, Maxwell and Dovey 2014; Louw and Zuber-Skerritt 2009; Rebello and Fletcher 2005), as are notions of professional identity (Underhill, Clarence-Fincham and Petersen 2014; McNiff 2008).

Carr and Kemmis call for AR to focus on 'the development of practitioners' own practices' (1986: 202), not in a technical, instrumental sense but in a personal, existential and authentic approach, producing research findings that meet the conventional standards and need not be mutually exclusive. However, Kemmis (2009) is clearer that the context is the change in three things: 'practitioners' practices, their understandings of their practices, and the conditions in which they practice. These three things – practices, how we understand them, and the conditions that shape them – are inevitably and incessantly bound together with each other' (2009: 463), as he felt in his 2006 work.

The literature indicates that there are various reasons to provide professional development. For example, there is development in terms of institutional staff requirements and contractual expectations (Barnes and Bennett 2001; Benson, Samarawickrema and O'Connell 2009; du Toit 2012); development as a choice for personal or professional growth (Bath 2011; Boulton 2014; Boulton and Hramiak 2012; Davies 2013); and areas of development that arise as a necessity or as a consequence of the AR project itself (Brown, Rich and Holtham 2014; Herbert and Rainford 2014). Scherman and du Toit (2008) seek to use a practical AR to introduce academics to new perspectives on student learning, and Fletcher and Zuber-Skerritt (2008) argue that AR improves teaching, learning and research through inclusive, collaborative processes.

AR findings have extensively advanced pedagogical practice via innovation in assessment (Bisman 2011; Hume 2009; Simms 2013; Ward and Padgett 2012), curriculum design (Walton 2011) and teaching (Abell 2005; Abraham 2014; Bar Shalom and Schechet 2008; Tormey et al. 2008; Wrench et al. 2013; Zambo and Isai 2012). There has been much discussion on innovative teaching practice with the emergence of m-learning and online systems. Virtual worlds have been introduced as learning environments as a means to introduce participants to opportunities impossible in real world settings (Mathews, Andrews and Luck 2012). Strategies have been formalised following

research into postgraduate students' reflections on self-efficacy in the use of social media tools to enhance learning (Machin-Mastromatteo 2012). Overall, however, AR remains embedded primarily in the assessment of the impact of curriculum change, and based on specific, localised case studies.

In studies by Abel (2005), Walton (2011), Zambo (2011), and Ward and Padgett (2012), changes to curricula were made and analysed using small-scale AR, yet lacked the generalisability necessary to have any impact further afield. One intervention focussing on the provision of learning support using online technology and multimedia has the potential for replicability across a range of disciplines and toward a variety of diverse applications (Brudermann 2010). Another project targets undergraduates' critical thinking skills through the development and deployment of a bespoke strategy tool that could lend itself to wider use (Eales-Reynolds et al. 2012). The growing imperative to utilise technology to support learning has led to research into a strategy for the integration of tools, content and pedagogy entitled TPACK (Stover and Veres 2013). In one project, recognition of the need for a guiding theory of e-Learning drawn from the principles of experiential learning has led to the construction of a multi-use and cross-disciplinary pedagogical tools (Beard et al. 2007).

Perhaps one of the most recognisable areas of modern institutional changes has been the introduction of eLearning. There are many accounts of AR projects that investigate the personal and professional changes needed to implement either blended learning (Johnson 2010; Kenney and Newcombe 2011) or online learning (Aksal 2009; Cochrane 2014; Ham and Davey 2005; Singh and Hardaker 2014; Thang et al. 2011). An aspect aligned to this is the use of technology. While Fletcher and Zuber-Skerritt (2008) claim technological advancement leads to an increased necessity for current understanding, Schols (2011) situates this within the expansion of higher education itself that, he argues, leaves technological competence lagging behind. It can also be seen in the uses and effectiveness of journals (Boulton and Hramiak 2012; Cabaroglu 2014; Geber and Nyanjom 2009; Farrell et al. 2012), blogs (Hramiak, Boulton and Irwin 2009; Thang et al. 2011) and portfolios (Gannon-Leary, Fontainha and Bent 2011; Jones 2010 2013; Klenowski, Askew and Carnell 2006; du Toit 2012) and e-portfolios (Boulton 2014).

Limitations

Much of the AR in the current literature, however, is performed with a single cohort by an insider researcher (Adler 2011; Cornelissen and Van der Berg 2013; Kur et al. 2008; Zambo and Isai 2012) who seeks to inform personal practice or assess a pedagogical modification. In many instances, the research process is neither transparent nor explicit, and therefore it is difficult to compare and attempt to generalise the findings by looking at the modification. The thematic analysis of the dataset uses the percentage of the pages on deep vs surface analysis. This is scrutinised by

numerous markers and the conclusions are more generalisable, resulting in a framework for integrating a learning journal assessment to enhance learning strategy. Bisman (2011), however, offers more detail about the methodology and epistemological matrix used in his assessment of multiple submissions to a single longitudinal learning journal. This enables scrutiny of the validity and rigour of the process and may result in an improvement in generalisability of AR studies in a broader arena.

In the bulk of the literature the AR is centred primarily on description of the reflective process rather than any detailed critical evaluation of the intervention/innovation and methodology. Such accounts rely heavily on personal teacher and student reflection; although this is an integral part of the AR process, a more mixed methods approach could widen the impact and scrutiny of the research. When a study focuses on a staff member's reflection it becomes highly dependent on personal social values, experience and beliefs (Adler 2011; Donche and Van Petergem 2004). Some studies counteract the insider nature of AR by using research assistants to observe, perform interviews and run focus groups, but the very nature of such small-scale AR projects militates against this rigour, so it is often impractical due to staff availability, cost and institutional support (Simms 2013).

A further limitation of the AR literature concerns its failure to address explicitly the ethical challenges overlooked by existing studies (Brydon-Miller, Greenwood and Eikeland 2006). Walton (2011) addresses institutional level ethics, while Halai (2011) reflects on the ethical differences of researchers and insider practitioners inherent in AR in their metasyntheses of work on AR dissertations. Again, the general lack of ethical consideration evident in AR publications could be seen to widen further the research gap between traditional and AR. AR is often connected to projects relating to personal practice and so raises ethical issues in relation to insider–researchers. Within higher education, action researchers also need to be aware of the dual set of responsibilities held. Teacher/researchers have professional 'fiduciary responsibilities' (Pecorino, Kincaid and Gironda 2008: 5) towards students – the researcher's actions are intended to be undertaken for the benefit of student learning – alongside the responsibility of a researcher to do no harm. The complexity of this position could usefully be explored and debated in the accounts of action researchers. The more explicit integration of ethical issues in planning AR projects and the subsequent accounts would strengthen the quality of subsequent research and enhance its claims to trustworthiness.

Finally, studies are frequently limited to the 'theatre of instruction' and micro-level contextualised pedagogic practice (Cullen et al. 2002). Studies that draw together multiple cohorts

or case studies to provide frameworks for pedagogical innovation, curricular change or assessment can, however, be applied to the wider area and increase impact. What works – and what does not – in localised contexts can be debated and contextualised more fully in the broader academic community.

Action research focusing on student engagement

Many education-based AR studies (Banerjee 2013; Scherman and du Toit 2008; Stewart 2012) focus on obtaining feedback or critique on teaching practice from students. Thus, students play a key role in improving teaching practice and contribute to the professional development or the resulting 'learning' by their educators.

Across the disciplines, the desire to focus on the student experience and, in particular, on issues of student engagement is noted as an emerging theme in recent literature. The need for students to be engaged in learning to reduce the high cost of failure of modern UK higher education for all is considered paramount (Bryson and Hand 2007; Mann 2001; Taylor and Pettit 2007). The effectiveness of teaching and learning strategies to improve student engagement in higher education can often be seen as a one-way process, namely the academics working hard to engage the students (Bryson and Hand 2007; Clynes 2009; Wisker et al. 2001). However, we can examine this as an interaction and a two-way process. The literature suggests that if students are engaged in the subject and the teaching sessions, then the teaching and learning strategies that may be used by the academic are drawn from a greater range and can thus improve the learning environment for all (Bates 2011; Bryson and Hand 2007; Clynes 2009; Hood 2012; Jennings and Kachel 2010; Mann 2001; Seib et al. 2011; Wisker et al. 2001). The use of AR to assess strategies where students are either passive or non-passive in the process is important in the development of an improved learning environment. The literature suggests that such a context, combined with two-way engagement, can reduce the alienation of students and help to encourage deeper learning (Bates 2011; Bryson and Hand 2007; Case 2008; Clynes 2009; Cook-Sather 2014; Hughes 2011; Mann 2001). A student engaged in learning does not necessarily result in higher achievement, but can lead to improved teaching and learning, provided both parties are engaged (Bryson and Hand 2007; Cook-Sather 2014; Jennings and Kachel 2010; Wisker et al. 2001).

In contrast to concerns over continuing hostility and the failure by interested parties to exploit AR as valid, high quality and socially relevant in the higher education environment (Greenwood 2007 2012), a resurgent interest in AR is reported in universities (Moore 2004), particularly among postgraduate and doctorate students (Huang 2010). Reasons put forward for this trend include increasing recognition of the value of PAR in fostering collaborative partnerships in

universities that break down the power divide between the educator as the researcher and the student as the 'researched' (Moore 2004). Where reactions of the involved practitioners are invited, Huang emphasises that engaged learning becomes more readily achieved and provides valuable opportunities for validation and dissemination, placing AR in a space that 'can integrate truth and power' (2010: 109). Engaged students, as AR participants, are potentially empowered by being provided with a space in which they can consider future actions based on newly acquired learning (McAllister et al. 2013) and self-defined valid knowledge (Carroll et al. 2011).

Reporting on her living theory approach to using AR in teaching undergraduates, Walton refers to Biggs' 'constructive alignment' (Biggs 1996; Biggs and Tang 2007), which recognises the influence of learning activities in the quality of a student's learning, emphasising that students need to create learning for themselves rather than it being something that is transmitted by the teacher; 'teaching in this context is seen as the catalyst for learning' (2011: 569). In arguing for the involvement of the learner in constructing a more meaningful and effective learning experience, Walton (citing Beard and Wilson 2006) promotes student voice as being more directly involved in their education. Rather than a fear of being assessed or a failure to reach expected learning outcomes, the inherent reflective process of AR offers opportunities to liberate those involved and potentially clear a pathway through the wilderness of seeking knowledge. In interacting with our own development as an emerging learner, as well as with the lecturers or supervisors, the reflective process encourages engagement and has the potential to transform practice (Grant 2007; Huang 2010).

The value of AR in enhancing student engagement through reflective practice, active participation and empowerment is in evidence in the many studies that clearly demonstrate effective examples of pedagogy and andragogy. Some examples are: student involvement in curriculum development and delivery (Coates and Dickinson 2012; McGuigan and MacDonald 2008; Seib, English and Barnard 2011; Wisker et al. 2001); developing student-led aims and learning objectives (Peters and Gray 2007; Walton, 2011); developing student self-awareness as active reflective practitioners (Askham 2008; Duenkel and Pratt 2013); critical reflection on action and promoting participation in social change (Hulse and Hulme 2012; Taylor and Petit; Zhang et al. 2014); developing student ownership of the teaching and learning process (Goh and Loh 2013; Kurzel 2011; Sankaran et al. 2007); mutual engagement in developing communities of practice (Gordon and Edwards 2012; Walsh, Rutherford and Sears 2010; Walton, 2011); cross-curricular discourse and collaboration (McAllister et al. 2013; Wisker et al. 2001); and peer-assisted learning (Hodgson, Benson and Brack 2013; Kurzel 2011).

In the literature, the interpretation of the nature of student engagement in AR varies and a key issue is the status of students and other stakeholders in relation to their position as an insider, an outsider or a co-collaborator. The issue of the insider/outsider is central to all approaches to AR. In general terms, an insider–researcher may be defined as a researcher who engages in research from within a community or the organisation. In AR terms, Herr and Anderson (2005) argue that the researcher may adopt a position as either an insider or an outsider, depending on the type of AR; in their view, what is important is the collaborative nature of the relationship between the researcher and the participants. Positionality within AR has been depicted by Herr and Anderson (2005) as a continuum on a scale of one to six, where the location of the researcher on the insider–outsider continuum is linked to a research approach ranging from 'the insider engaged in self-study' to 'the outsider researching the insider'. Table 1 summarises this approach.

Table 1 here please

In relation to student engagement in AR projects, at one end of the continuum (Position 1) are those engaged in self-study and the study of their own practice. In the broadest sense, it is possible to conceptualise this group as practitioners, researchers and students (Chang Chien, Yu and Lin 2013; Choi 2011). Herr and Anderson (2005) describe Position 2 as AR involving the insider in collaboration with other insiders, and Position 3 as AR where the insider works in collaboration with outsiders. Position 4 on the continuum applies to participants engaged in projects where the relationship between participants is one of reciprocal collaboration involving insider–outsider teams adopting collaborative forms of Participatory Action Research (PAR).

Generally, students undertake research as part of a course of study either individually, with other students, or in co-collaboration with community groups (Sorenson and Lawson 2011). In such cases the students' work is assessed and contributes to their final grade for the module and the course. This is an important factor that Kindon and Elwood (2009) argue is one of the challenges of co-collaborative AR involving students on formal courses. Students also engage in AR projects outside of their formal coursework. They may be asked to participate in an AR project initiated by a university teacher on a variety of topics, including those designed to improve teaching, learning and assessment strategies, or to improve the student experience (Farrell, Vernaza, Perkins et al. 2012; Moore and Gayle 2010; Paiewonsky 2011; Ssajjakambwe et al. 2013).

The benefits of student engagement in AR, particularly on co-collaborative projects involving community stakeholders, include providing opportunities for a better understanding of community (Moore and Gayle 2010) and enhanced community engagement resulting in enhanced intellectual, social and emotional engagement (Pain et al. 2013), and improved theory–practice links and construction of collaborative knowledge (Katsarou and Tsafos 2013). Moore and Gayle (2010)

suggest that students' engagement in projects in collaboration with university teachers results in improved relations between them. In relation to teaching, learning and assessment, student engagement in AR projects recognises the value of the student contribution to curriculum development (Kur, DePorres and Westrup 2008). Kur, DePorres and Westrup (2008) suggest that student engagement with AR raises the students' profile and ensures that their voice, as key stakeholders, is heard, potentially resulting in their personal growth and an improved curriculum for faculty members.

The challenges in this process relate largely to the relative power of stakeholders in co-collaborative projects and include issues relating to authorship, scale, privilege and community stakeholder requirements (Kindon and Elwood 2009). From the student perspective, when participating in a co-collaborative project with community stakeholders as part of a formally assessed course there are pragmatic issues of timing and project overrun that need to be addressed and resolved.

Current literature suggests that the type of assessment used in higher education can play a part in improving the engagement of the student, with a variety of forms – formative, peer, and group work – all implemented with varying success (Prunty and Crean 2011; Weaver and Esposto 2012; Welsh 2012 2008). If students perceive the assessment as fair (particularly in respect of group work) and relevant to the subject, it can help their level of engagement (Prunty and Crean 2011; Weaver and Esposto 2012). Measurement of their engagement as a result of the introduction of an assessment change through AR has produced interesting results (Hughes 2011; Min et al. 2011; Prunty and Crean 2011; Taylor and Pettit 2007; Weaver and Esposto 2012; Welsh 2008, 2012). In student cohorts the levels of engagement and re-engagement of alienated students generally increases upon introduction of a new assessment mode, in particular the use of peer assessment (Min et al. 2011; Prunty and Crean 2011; Weaver and Esposto 2012; Welsh 2012). It appears that alienated students attempt to re-engage, as their peers perceive that such individuals obtain fairer marks. As a result, an enhanced learning environment is created with higher levels of overall engagement (Case 2008; Mann 2001; Min et al. 2011; Prunty and Crean 2011; Weaver and Esposto 2012; Welsh 2012). The level varies between studies and may be dependent on whether the students are passive (Pahinis et al. 2007; Seib et al. 2011; Weaver and Esposto 2012) or non-passive (Bates 2011; Cook-Sather 2014; Currie et al. 2012; Welsh 2012).

Furthermore, the use of technology to enhance teaching and learning in higher education shows a link to student engagement (Charles et al. 2008; Currie et al. 2012; Gillies 2008; Hughes 2011; Welsh 2012). The implementation of technology to enhance teaching and learning is critical to

the students' engagement in learning online: projects, sets, modules and lectures often suffer from varying levels of engagement (Charles et al. 2008; Currie et al. 2012; Gillies 2008; Pahinis et al. 2008). A blended approach to the use of technology, where students meet academics at crucial points, or milestones, to establish the expectations for the next stage of learning, could potentially boost engagement (Currie et al. 2012; Hughes 2011; Pahinis et al. 2008; Welsh 2008). The use of technology in teaching and learning in a blended fashion is not new and can produce more engaged cohorts, particularly if involved in AR (Currie et al. 2012; Jennings and Kachel 2010; Morris 2012; Pahinis et al. 2008; Welsh 2012). Through using different teaching and learning approaches and technologies, multiple-subject student cohorts can be engaged in the same learning session (Morris 2012; Pahinis et al. 2008). The literature suggests that a varied blended approach to technology use in teaching and learning has the potential to create engaged student communities across subjects (Jennings and Kachel 2010; Morris 2012; Pahinis et al. 2007; Welsh 2012).

Limitations

Limitations common to some of the AR studies in this area include a lack of reporting on the AR stages or cycles in a way that allows others to analyse the study systematically. Another is the time and resources that are required. This is noted by Jacobs, who observed:

> when time pressure rose, the empowerment goal started to collide with academic
> and practical aims, and the dialogue within the project team became obstructed
> leading to a return to the traditional routine of applied research and the
> accompanying power relationships, with implications for the learning in and
> about the project. (Jacobs 2010: 367)

Relating to this limitation is dissemination or 'ownership' tensions, for instance whether authorship of articles is shared between university academics and practitioners/participants as co-researchers. McVicar, Munn-Giddings and Abu-Helil conducted a comparative review of AR in nursing and social work between 2000 and 2010, observing that authorship was dominated by university academics, 'despite participating practitioners and/or users having significant roles in the whole research process' (2012: 81). This suggests that, despite claims of practitioners and participants as co-researchers, it is mainly the university-based academics who publish research, implying their ultimate ownership.

Concluding comments

Action research in higher education's educational mission has become a central theme in research. It pervades pedagogical and curriculum theory, is reflected in the disciplinary foci on teaching and learning, and is a central tool in the development of institutional change. For the most part as an

ontologic-epistemological stance, it retains its emancipatory core and has a multi-disciplinary flexibility that is evident in the literature. The intricacies of the relationship between pedagogic AR in higher education are impacted upon by the disciplines involved and the extent to which they and the professions embrace AR as a valued research method. How AR is used to research pedagogy in higher education is linked to this broader use of AR. Reviewing the current literature suggests that some of its strengths and weaknesses in relation to pedagogy and higher education are mirrored in its use in the broader disciplinary and professional arena.

However, alongside a growth in popularity and many examples of emancipatory educational initiatives, Kemmis' (2006) warnings concerning the domestication of educational AR noted earlier, while aimed only at improving teaching practice or techniques, also apply in relation to the literature on student engagement. Kemmis (2006) argues that such AR studies are inadequate at the level required by critical educational science in the transformation of social, cultural, discursive and material conditions under which individual practice takes place. Levin (2012) similarly argues that to ensure the academic integrity of AR, this critical and reflective research has to be combined with engagement at a deeply empathic and political level, positioned outside of the experience of the researcher. In ensuring rigorous and transparent reasoning, however, Levin (2012) warns of the challenge of balancing a depth of involvement with the critical distance essential to analyse the data, reframe arguments and develop new insights.

Changes in higher education policy, driven by an explicit metrics of student satisfaction and the need for students to engage in their learning whilst registered at a higher education institution, argue for strong, practice-based evidence for what teaching can achieve. In an economic consumeristic model of higher education, an unjustified and holist concept of edification is seemingly not satisfactory. Evidence of how practice can be improved and its impact on the learning of students (and staff) is becoming critical to the changing character of higher education and its accountability to both government and students. These studies have shown how AR as both a practice and a methodology can provide this evidence. AR has produced important change in practice, but needs to continue to evolve and respond to the limitations identified in this review. This study is intended to contribute to this outcome.

References

Abell, S.K. 2005. 'University Science Teachers as Researchers: Blurring the scholarship boundaries.' *Research in Science Education* 35: 281–298.

Abraham, A. 2014.' Making Sense of Power Relations in a Malaysian English as a Second Language Academic Writing Classroom.' *Educational Action Research* 22 (4): 472–487.

Adler, S.M. 2011. 'Teacher Epistemology and Collective Narratives: Interrogating Teaching and Diversity.' *Teaching and Teacher Education* 27: 609–618.

Aksal, F.A. 2009. 'Action Plan on Communication Practices: Roles of Tutors at EMU Distance Education Institute to Overcome Social Barriers in Constructing Knowledge.' *Turkish Online Journal of Educational Technology* 8: 33–47.

Askham, P. 2008. 'Context and Identity: Exploring Adult Learners' Experiences of Higher Education.' *Journal of Further and Higher Education* 32 (1): 85–97.

Avdjieva, M. 2005. 'Learning to Foster Builders of Knowledge Economy.' *International Journal of Learning* 12: 223–233.

Banerjee, S. 2013. 'Adaptation of Bharatanatyam Dance Pedagogy for Multicultural Classrooms: Questions and Relevance in a North American University Setting.' *Research in Dance Education* 14 (1): 20–38.

Baptist, K.W., and F. Nassar. 2009. 'Social Justice Agency in the Landscape Architecture Studio: An Action Research Approach.' *Art, Design and Communication in Higher Education* 7 (2): 91–103.

Barnes, S, and N. Bennett. 2001. 'Promoting a Culture of collaboration Through Continuing Professional Development (CPD).' *Management in Education* (Education Publishing Worldwide Ltd) 15, (5): 13.

Bates, E. 2011. 'Engaging in an Action Research Cycle on the Irish Standards-Based Apprenticeship to Provide Time For Learners' Engagement.' *Edulearn11*, pp. 1148–1154. 3rd International Conference on Education and New Learning Technologies, July, Barcelona.

Bath, C. 2011. 'Participatory Concepts of Multidisciplinary/Professional Working on an Early Childhood Studies Degree Course in the UK.' *Early Years: Journal of International Research & Development* 31 (2): 181–192.

Beard, C., and J. Wilson. 2006. *Experiential Learning: A Best Practice Handbook for Educators and Trainers* (2nd edn). London: Kogan Page.

Beard, C., J.P. Wilson, and R. McCarter. 2007. 'Towards a Theory of e-learning: Experiential E-learning.' *Journal of Hospitality Leisure Sport and Tourism Education* 6: 3–15.

Benn, S., and D. Dunphy. 2009. 'Action Research as an Approach to Integrating Sustainability into MBA Programs: An Exploratory Study.' *Journal of Management Education* 33: 276–295.

Benson, R., G. Samarawickrema, and M. O'Connell. 2009. 'Participatory Evaluation: Implications for Improving Electronic Learning and Teaching Approaches.' *Assessment and Evaluation in Higher Education* 34 (6): 709–720.

Bianchini, S., T. Maxwell, and K. Dovey. 2014. 'Rethinking Leadership in the Academy: An Australian Case.' *Innovations in Education and Teaching International* 51 (5): 556–567.

Biggs, J. 1996. 'Enhancing Teaching through Constructive Alignment.' *Higher Education* 32 (3): 347–364.

Biggs, J., and C. Tang. 2007. *Teaching for Quality Learning at University.* Maidenhead: Open University Press/McGraw Hill.

Bisman, J. 2011. 'Engaged Pedagogy: A Study of the Use of Reflective Journals in Accounting Education.' *Assessment and Evaluation in Higher Education* 36 (3): 315–330.

Boulton, H. 2014. 'e-Portfolios beyond Pre-Service Teacher Education: A New Dawn?' *European Journal of Teacher Education* 37 (3): 374–338.

Boulton, H., and A. Hramiak. 2012. 'E-flection: The Development of Reflective Communities of Learning for Trainee Teachers through the Use of Shared Online Web Blogs.' *Reflective Practice: International and Multidisciplinary Perspectives* 13 (4): 503–515.

Boyer, E.L. 1990. *Scholarship Reconsidered: Priorities of the Professoriate.* Princeton, NJ: Princeton University Press/Carnegie Foundation for the Advancement of Teaching.

Brown, A., M. Rich, and C. Holtham. 2014. 'Student Engagement and Learning: Case Study of a New Module for Business Undergraduates at Cass Business School.' *Journal of Management Development* 33 (6): 603–619.

Brudermann, C. 2010. 'From Action Research to the Implementation of ICT Pedagogical Tools: Taking into Account Students' Needs to Propose Adjusted Online Tutorial Practice.' *Recall* 22: 172–190.

Brydon-Miller, M., D. Greenwood, and O. Eikeland, O. 2006. 'Conclusion: Strategies for Addressing Ethical Concerns in Action Research.' *Action Research* 4: 129–131.

Bryson, C., and L. Hand. 2007. 'The Role of Engagement in Inspiring Teaching and Learning.' *Innovations in Education and Teaching International* 44, 349–362. doi:10.1080/14703290701602748

Burchell, H., and J. Dyson. 2005. 'Action Research in Higher Education: Exploring Ways of Creating and Holding the Space for Reflection.' *Educational Action Research* 13, 291–300.

Cabaroglu, N. 2014. 'Professional Development through Action Research: Impact on Self-efficacy.' *System* 44 (June): 79–88.

Carr, W., and S. Kemmis. 1986. *Becoming Critical: Education, Knowledge and Action Research.* London: Falmer.

Carroll, F., A. Jenkins, C. Woodward, R. Kop, and E. Jenkins. 2011. 'Exploring How Social Media Can Enhance the Teaching of Action Research.' *Action Research* 10 (2): 170–188.

Case, J.M. 2008. 'Alienation and Engagement: Development of an Alternative Theoretical Framework for Understanding Student Learning.' *Higher Education* 55: 321–332. doi:10.1007/s10734-007-9057-5

Chang Chien, C., K. Yu, and L. Lin. 2013. 'A Reflective Self-Inquiry into My Teaching Practices with Non-English Major Technological University Students.' *Canadian Journal of Action Research* 14 (3): 59–71.

Charles, M.-T., D. Bustard, and M. Black. 2008. 'Game Inspired Tool Support for e-Learning Processes.' *Electronic Journal of e-Learning* 7 (2): 101-110), available online at www.ejel.org

Chesney, S., and C. Marcangelo. 2010. 'There Was a Lot of Learning Going On: Using a Digital Medium to Support Learning in a Professional Course for New HE Lecturers.' *Computers and Education* 54: 701–708.

Choi, J. 2011. 'Studying Teacher Education, Journal of Self-Study of Teacher.' *Education Practices* 7 (1): 35–49.

Clynes, M.P. 2009. 'A Novice Teacher's Reflections on Lecturing as a Teaching Strategy: Covering the Content or Uncovering the Meaning.' *Nurse Education Practitioner* 9: 22–27. doi:10.1016/j.nepr.2008.03.007

Coates, N., and J. Dickinson. 2012. 'Meeting International Postgraduate Student Needs: A Programme Based Model for Learning and Teaching Support.' *Innovations in Education and Teaching International* 49 (3): 295–308.

Cochrane, T.D. 2014. 'Critical Success Factors for Transforming Pedagogy with Mobile Web 2.0.' *British Journal of Educational Technology* 45 (1): 65-82.

Cook-Sather, A. 2014. 'Multiplying Perspectives and Improving Practice: What Can Happen When Undergraduate Students Collaborate with College Faculty to Explore Teaching and Learning.' *Instructional Science* 42: 31–46. doi:10.1007/s11251-013-9292-3

Cornelissen, F., and E. Van den Berg. 2013. 'Characteristics of the research Supervision of Postgraduate Teachers' Action Research.' *Educational Studies* 40: 237–252.

Cullen, J., K. Hadjivassiliou, E. Hamilton, J. Kelleher, E. Sommerlad, and E. Stern. 2002. 'Review of Current Pedagogic Research and Practice in the Fields of Post-Compulsory Education and Lifelong Learning.' Final Report by Tavistock Institute, submitted to ESRC.

Currie, K., J. Biggam, J. Palmer, and T. Corcoran. 2012. 'Participants' Engagement with and Reactions to the Use of On-Line Action Learning Sets to Support Advanced Nursing Role Development.' *Nurse Education Today* 32: 267–272.

Davies, T. 2013. 'Incorporating Creativity into Teachers' Practice and Self-Concept of Professional Identity.' *Journal of Educational Change* 141 (1): 51–71.

Donche, V., and P. Van Petergem. 2004. 'Action Research and Open Learning: In Search of an Effective Research.' *Educational Action Research* 12: 413–432.

Duenkel, N., and J. Pratt. 2013. 'Ecological Education and Action Research: A Transformative Blend for Formal and Non-Formal Educators.' *Action Research* 11 (2): 125–141.

Eales-Reynolds, L.J., D. Gillham, C. Grech, C. Clarke, and J. Cornell. 2012. 'A Study of the Development of Critical Thinking Skills Using an Innovative Web 2.0 Tool.' *Nurse Education Today* 32 (7): 752–756.

Ericson-Lidman, E., and G. Strandberg, 2013. 'Care Providers Learning to Deal with Troubled Conscience through Participatory Action Research.' *Action Research* 11, 386–402.

Farrell, J.B., N.A. Vernaza, S.S. Perkins, J.L. Ricketts-Duncan, and D.J. Kimbar. 2012. 'Transcending Boundaries and Borders: Constructing Living Theory through Multidimensional Inquiry.' *Educational Journal of Living Theories* 5 (1): 27–48.

Fieldhouse, J., and S. Onyett. 2012. 'Community Mental Health and Social Exclusion: Working Appreciatively towards Inclusion.' *Action Research* 10: 356–372.

Fletcher, M.A., and O. Zuber-Skerritt. 2008. 'Professional Development through Action Research: Case Examples in South African Higher Education.' *Systemic Practice and Action Research* 21 (1): 73–96.

Furtado, L., and D. Anderson. 2012. The Reflective Teacher Leader: An Action Research Model. *Journal of School Leadership* 22: 531–568.

Gannon-Leary, P, Fontainha, E., Bent, M. 2011.' The Loneliness of the Long Distance Researcher.' *Library Hi Tech* 29 (3): 455–469.

Garcia, L.M., and N.P. Roblin. 2008.' Innovation, Research and Professional Development in Higher Education: Learning from Our Own Experience.' *Teaching and Teacher Education* 24 (1): 104–116.

Geber, H., and J.A. Nyanjom. 2009. 'Mentor Development in Higher Education in Botswana: How Important is Reflective Practice?' *South African Journal of Higher Education* 23 (5): 894–911.

Getz, C. 2009. 'Teaching Leadership as Exploring Sacred Space.' *Educational Action Research* 17: 447–461.

Gibbs, P., P. Angelides, and P. Michaelides. 2004. 'Preliminary Thoughts on a Praxis of Higher Education Teaching.' *Teaching in Higher Education* 9, (2): 183–194.

Gillies, D. 2008. 'Student Perspectives on Videoconferencing in Teacher Education at a Distance.' *Distance Education* 29: 107–118. doi:10.1080/01587910802004878

Goh, L.H., and K.-C. Loh. 2013. '"Let them fish": Empowering Student Teachers for Professional Development through the Project Approach.' *Educational Action Research* 21 (2): 202–217.

Gordon, S.M., and J.L. Edwards. 2012. 'Enhancing Student Research through a Virtual Participatory Action Research Project: Student Benefits and Administrative Challenges.' *Action Research* 10: 205–220.

Grant, A. 2007. 'Learning through "Being" and "Doing".' *Action Research* 5 (3): 265–274.

Gravett, S. 2004. 'Action Research and Transformative Learning in Teaching Development.' *Educational Action Research* 12: 259–272. doi:10.1080/09650790400200248

Greenbank, P. 2007. 'Utilising Collaborative Forms of Educational Action Research: Some Reflections.' *Journal of Further and Higher Education* 31: 97–108.

Greenwood, D.J. 2007. 'Teaching/learning Action Research Requires Fundamental Reforms in Public Higher Education.' *Action Research* 5 (3): 249–264.

Greenwood, D.J. 2012. 'Doing and Learning Action Research in the Neo-Liberal World of Contemporary Higher Education.' *Action Research* 10, 115–132.

Guy Wamba, N. 2011. 'Developing an Alternative Epistemology of Practice: Teachers' Action Research as Critical Pedagogy.' *Action Research* 9: 162–178.

Halai, N. 2011. 'How Teachers Become Action Researchers in Pakistan: Emerging Patterns from a Qualitative Metasynthesis.' *Educational Action Research* 19: 201–214.

Ham, V., and R. Davey. 2005. 'Our First Time: Two Higher Education Tutors Reflect on Becoming a "Virtual Teacher".' *Innovations in Education and Teaching International* 42 (3): 257–264.

Harland, T., and D. Staniforth. 2000. 'Action Research: A Culturally Acceptable Path to Professional Learning for University Teachers?' *Educational Action Research* 8 (3): 499–514.

Herbert, S., and M. Rainford. 2014. 'Developing a Model for Continuous Professional Development by Action Research.' *Professional Development in Education* 40 (2): 243–264.

Herr, K., and G. Anderson. 2005. *The Action Research Dissertation: A Guide for Students and Faculty.* London: Sage.

Hodgson, Y., R. Benson, and C. Brack. 2013. 'Using Action Research to Improve Student Engagement in a Peer-Assisted Learning Programme.' *Educational Action Research* 21 (3): 359–375.

Hodgson, D., S. May, and D. Marks-Maran. 2008. 'Promoting the Development of a Supportive Learning Environment through Action Research from the Middle Out.' *Educational Action Research* 16: 531–544.

Hood, A. 2012. 'Whose Responsibility is it? Encouraging Student Engagement in the Learning Process.' *Music Education Research*, 14: 457–478. doi:10.1080/14613808.2012.703174

Hramiak, A., H. Boulton, and B. Irwin. 2009. 'Trainee Teachers' Use of Blogs as Private Reflections for Professional Development.' *Learning, Media and Technology* 34 (3): 259–269.

Huang, H.B. 2010. 'What is Good Action Research? Why the Resurgent Interest?' *Action Research* 8 (1): 93–101.

Hubball, H.T., and H. Burt. 2006. 'The Scholarship of Teaching and Learning: Theory–Practice Integration in a Faculty Certificate Program.' *Innovative Higher Education* 30: 327–344. doi:10.1007/s10755-005-9000-6

Hughes, K. 2011. 'The Wiki Way: Supporting collaborative Learning for First Year Students.' *Edulearn11*, pp. 4155–4164. 3rd International Conference on Education and New Learning Technologies, July, Barcelona.

Hulse, B., and R. Hulme. 2012. 'Engaging with Research through Practitioner Enquiry: The Perceptions of Beginning Teachers on a Postgraduate Initial Teacher Education Programme.' *Educational Action Research* 20 (2): 313–329.

Hume, A. 2009. 'Promoting Higher Levels of Reflective Writing in Student Journals.' *Higher Education Research and Development* 28: 247–260.

Humphries-Mardirosian, G.H., S. Irvine Belson, and Y.P. Lewis. 2009. 'Arts-based Teaching: A Pedagogy of Imagination and a Conduit to a Socially Just Education.' *Current Issues in Education* 12: 1–21.

Hungerford-Kresser, H., J.L. Wiggins, and C. Amaro-Jimenez. 2014. 'Blogging with Pre-service Teachers as Action Research: When Data Deserve a Second Glance.' *Educational Action Research* 22: 325–339.

Jacobs, G. 2010. 'Conflicting Demands and the Power of Defensive Routines in Participatory Action Research.' *Action Research* 8: 367–386. doi:10.1177/1476750310366041

Jacobs, G., and M. Murray. 2010. 'Developing Critical Understanding by Teaching Action Research to Undergraduate Psychology Students'. *Educational Action Research* 18: 319–335.

Jennings, G., and U. Kachel. 2010. 'Online Learning: Reflections on the Effectiveness of Two Undergraduate Tourism Modules – Sustainability and Corporate Social Responsibility.' *Edulearn10*, pp. 1738–1747. 2nd International Conference on Education and New Learning Technologies, July, Barcelona.

Johnson, J. 2015. Speech: 'Teaching at the Heart of the System.' Delivered at Universities UK, London, 1 July. Online at https://www.gov.uk/government/speeches/teaching-at-the-heart-of-the-system (accessed 15 July 2015).

Johnson, N.F. 2010. 'Using an Instructional Design Model to Evaluate a Blended Learning Subject in a Pre-Service Teacher Education Degree.' *International Journal of Learning* 17 (2): 65–80.

Jones, E. 2010. 'Enhancing Professionalism through a Professional Practice Portfolio.' *Reflective Practice* 11 (5): 593–605.

Jones, S. 2013. 'Beyond the Teaching-Research Nexus: The Scholarship-Teaching-Action-Research (STAR) Conceptual Framework.' *Higher Education Research and Development* 32 (3): 381–391.

Junyent, M., and A.M.G. de Ciurana. 2008. 'Education for Sustainability in University Studies: A Model for Reorienting the Curriculum.' *British Educational Research Journal* 34: 763–782.

Katsarou, E., and V. Tsafos. 2013. 'Student-teachers as Researchers: Towards a Professional Development Orientation in Teacher Education.' Possibilities and Limitations in the Greek University. *Educational Action Research* 21 (4): 532–548.

Kemmis, S. 2001. 'Exploring the Relevance of Critical Theory for Action Research: Emancipatory Action Research in the Footsteps of Jürgen Habermas.' In P. Reason and H. Bradbury (eds), *Handbook of Action Research: Participative Inquiry and Practice,* pp. 91–102. London: Sage.

Kemmis, S. 2006. 'Participatory Action Research and the Public Sphere.' *Educational Action Research* 14 (4): 459–476.

Kemmis, S. 2009. 'Action Research as a Practice-based Practice.' *Educational Action Research* 17 (3): 463–474.

Kenney, J., and E. Newcombe. 2011. 'Adopting a Blended Learning Approach: Challenges Encountered and Lessons Learned in an Action Research Study.' *Journal of Asynchronous Learning Networks* 15 (1): 47–59.

Kindon, S., and S. Elwood. 2009. Introduction: 'More than Methods—Reflections on Participatory Action Research in Geographic Teaching, Learning and Research.' *Journal of Geography in Higher Education* 33: 19–32.

Kinsler, K. 2010. 'The Utility of Educational Action Research for Emancipatory Change.' *Action Research* 8 (2), 171–189.

Klenowski, V., S. Askew, and E. Carnell. 2006. 'Portfolios for Learning, Assessment and Professional Development in Higher Education.' *Assessment and Evaluation in Higher Education* 31 (3): 267–286.

Klein, L.A., J.E. Ritchie, S. Nathan, and S, Wutzke. 2014. 'An Explanatory Model of Peer Education within a Complex Medicines Information Exchange Setting.' *Social Science & Medicine* 111, 101–109.

Kur, E.E., D. DePorres, and N. Westrup. 2008. 'Teaching and Learning Action Research: Transforming Students, Faculty and University in Mexico.' *Action Research* 6: 327–349. doi:10.1177/1476750308094648

Kurzel, F. 2011. 'Characteristics of an Equitable Instructional Methodology for Courses in Interactive Media.' *Interdisciplinary Journal of E-Learning and Learning Objects* 7: 143–156.

Levin, M., and A.W. Martin. 2007. 'The Praxis of Educating Action Researchers: The Possibilities and Obstacles in Higher Education.' *Action Research* 5: 219–229.

Levin, M. 2012. 'Academic Integrity in Action Research.' *Action Research* 10 (2): 133–149.

Lorenzetti, L., and C. Ann Walsh. 2014. 'Is There an 'F' in your PAR? Understanding, Teaching and Doing Action Research.' *Canadian Journal of Action Research* 15: 50–64.

Louw, I., and O. Zuber-Skerritt. 2009. 'Reflecting on a Leadership Development Programme: A Case Study in South African Higher Education.' *Perspectives in Education* 27 (3): 237–246.

Lucas, L. 2007. 'Research and Teaching Work within University Education Departments: Fragmentation or Integration?' *Journal of Further and Higher Education* 31: 17–29.

Machin-Mastromatteo, J.D. 2012. 'Participatory Action Research in the Age of Social Media: Literacies, Affinity Spaces and Learning.' *New Library World* 113: 571–585.

Mann, S.J. 2001. 'Alternative Perspectives on the Student Experience: Alienation and Engagement.' *Studies in Higher Education* 26: 7–19. doi:10.1080/03075070020030689

Mathews, S., L. Andrews, and E. Luck. 2012. 'Developing a Second Life Virtual Field Trip for University Students: An Action Research Approach.' *Educational Research* 54: 17–38.

McAllister, M., F. Oprescu, T. Downer, M. Lyons, F. Pelly, and N. Barr. 2013. 'Evaluating STAR – A Transformative Learning Framework: Interdisciplinary Action Research in Health Training.' *Educational Action Research* 21 (1): 90–106.

McGuigan, N.C., and K. MacDonald. 2008. 'Engaging First Year Learners: Creating Learning Pathways Via Relevance in an Accounting Decision-Making Course.' *International Journal of Learning* 15 (2): 149–161.

McNiff, J. 2008. 'The Significance of "I" in Educational Research and the Responsibility of Intellectuals.' *South African Journal of Education* 28 (3): 351–364.

McVicar, A., C. Munn-Giddings, and C. Abu-Helil. 2012. 'Exploring the Development of Action Research in Nursing and Social Care in the UK: A Comparative Bibliometric Review of Action Research Designs in Social Work (2000–2010).' *Action Research* 10: 79–101. doi:10.1177/1476750312439902

Millican, J. 2014. 'Higher Education and Student Engagement: Implications for a New Economic Era.' *Education + Training* 56: 635–649.

Millwood, R., and S. Powell. 2011. 'A Cybernetic Analysis of a University-Wide Curriculum Innovation.' *Campus-Wide Information Systems* 28: 258–274.

Min, G.L.W., V.T.C. Wai, and N. Osman. 2011. 'Creative Engagement of Learners with Text-to-Movie Technology.' *Edulearn11*, pp. 1215–1225. 3rd International Conference on Education and New Learning Technologies, July, Barcelona.

Miskovic, M., and K. Hoop. 2006. 'Action Research Meets Critical Pedagogy: Theory, Practice, and Reflection.' *Qualitative Inquiry* 12: 269–291.

Moate, J., M. Ruohotie-Lyhty. 2014. 'Identity, Agency and Community: Reconsidering the Pedagogic Responsibilities of Teacher Education.' *British Journal of Educational Studies* 62: 249–264.

Moore, J. 2004. 'Living in the Basement of the Ivory Tower: A Graduate Student's Perspective of Participatory Action Research within Academic Institutions.' *Educational Action Research* 12 (1): 145–162.

Moore, T., and B.M. Gayle. 2010. 'Student Learning through Co-curricular Dedication: Viterbo University Boosts Faculty/Student Research and Community Services.' *Transformative Dialogues: Teaching & Learning Journal* 4 (1): 1–7.

Morris, A. 2012. 'Seeking New Ways of Living Community in the Classroom and the World: An Action Research Study.' *Research into Dance Education* 13: 235–251. doi:10.1080/14647893.2012

Orland-Barak, L. 2004. 'What Have I Learned from All This? Four Years of Teaching an Action Research Course: Insights of a "Second Order".' *Educational Action Research* 12: 33–58.

Pahinis, K., C.W. Stokes, T.F. Walsh, and G. Cannavina. 2007. 'Evaluating a Blended-learning Course Taught to Different Groups of Learners in a Dental School.' *Journal of Dental Education* 71: 269–278.

Pahinis, K., C.W. Stokes, T.F. Walsh, E. Tsitrou, and G. Cannavina. 2008. 'A Blended Learning Course Taught to Different Groups of Learners in a Dental School: Follow-up Evaluation.' *Journal of Dental Education* 72: 1048–1057.

Paiewonsky, M. 2011. 'Hitting the Reset Button on Education: Student Reports on Going to College.' *Career Development for Exceptional Individuals* 34 (1): 31–44.

Pain, R., M. Finn, R. Bouveng, and G. Ngobe. 2013. 'Productive Tensions—Engaging Geography Students in Participatory Action Research with Communities.' *Journal of Geography in Higher Education* 37 (1): 28–43.

Paulsen, M.B. 2001. 'The Relation between Research and the Scholarship of Teaching.' In C. Kreber, *New Directions for Teaching & Learning, No.* 86, pp. 19–29. San Francisco: Jossey Bass.

Pecorino, P.A., S. Kincaid, and B. Gironda. 2008. 'Research and Experimentation in Teaching Effectiveness: The Ethical Review Process and the IRB.' *International Journal for the Scholarship of Teaching and Learning* 2 (1): 1–11.

Peters, J.M., and A. Gray. 2007. 'Teaching and Learning in a Model-based Action Research Course.' *Action Research* 5 (3): 319–331.

Pilkington, R.M. 2009. 'Practitioner Research in Education: The Critical Perspectives of Doctoral Students.' *Studies in the Education of Adults* 41, 154–174.

Price, J.N. 2001. 'Action Research, Pedagogy and Change: The Transformative Potential of Action Research in Pre-Service Teacher Education.' *Journal of Curriculum Studies* 33, 43–74.

Price, J.N., and L. Valli. 2005. 'Preservice Teachers Becoming Agents of Change.' *Journal of Teacher Education* 56: 57–72.

Prunty, C., and M. Crean. 2011. 'Formative Assessment Structures to Enhance Student Learning Despite Resource Limitations.' *Inted*, pp. 5985–5993. 5th International Technological Education Development Conference.

Rebello, N.S., and P.R. Fletcher. 2005. 'Teacher–Researcher Professional Development: Case Study at Kansas State University.' In P. Heron, L. McCullogh and J. Marx, *Physics Education Research Centre* 18: 129–132.

Tormey, R., M. Liddy, H. Maguire, and A. McCloat. 2008. 'Working in the Action/research Nexus for Education for Sustainable Development.' *International Journal of Sustainability in Higher Education* 9: 428–440.

Sankaran, S., S. Hase, B. Dick, and A. Davies. 2007. 'Singing Different Tunes from the Same Song Sheet: Four Perspectives of Teaching the Doing of Action Research*.' Action Research* 5: 293–305.

Scherman, V. and P. du Toit. 2008. 'Cooperative Learning in Postgraduate Lectures: Possibilities and Challenges.' *South African Journal of Higher Education* 22 (2): 423–438.

Schols, M. 2011. 'Action Research as a Qualitative Research Approach for Understanding Technology Professional Development in Higher Education.' *Inted2011*, pp. 1876–1886. 5th International Technology, Education and Development Conference.

Schön, D. 1995. 'Knowing-in-Action: The New scholarship Requires a New Epistemology.' *Change,* 27, November/December: 27–34.

Seib, C., R. English, and A. Barnard. 2011. 'Teaching Undergraduate Students Community Nursing: Using Action Research to Increase Engagement and Learning.' *Journal of Nursing Education* 50: 536–539. doi:10.3928/01484834-20110531-03

Shalom, Y.B., N. Schechet. 2008. 'Reflective Practice: A Student-oriented Pedagogy for Veteran Teachers.' *Teaching Education* 19: 211–221.

Simms, M. 2013. 'A Teacher–Educator Uses Action Research to Develop Culturally Conscious Curriculum Planners.' *Democracy & Education* 21: 1–10.

Singh, F., and G. Hardaker. 2014. 'Barriers and Enablers to Adoption and Diffusion of eLearning. A Systematic Review of the Literature – A Need for an Integrative Approach.' *Education + Training* 56 (2/3): 105–121.

Smith, K., and S. Fernie. 2010. 'Exposing New Academics through Action Research?' *International Journal for Academic Development*, 15: 85–87. doi:10.1080/13601440903529950

Smith, L., L. Bratini, D.-A Chambers, J.V. Jensen, and L. Romero. 2010. 'Between Idealism and Reality: Meeting the Challenges of Participatory Action Research.' *Action Research,* 8: 407–425.

Sorenson, J., and L. Lawson. 2011. 'Evolution in Partnership: Lessons from the East St Louis Action Research Project.' *Action Research* 10 (2): 150–169.

Ssajjakambwe, P., K. Stevens, V. Patrick, J.B. Kaneene, C. Setumba, G. Bahizi, and J.D. Kabasa. 2013. 'Creating Open Education Resources for Teaching and Community Development through Action Research: The Milk Production and Hygiene Module.' *Journal of Asynchronous Learning Networks* 17 (2): 43–50.

Stewart, J. 2012. 'Reflecting on Reflection: Increasing Health and Social Care Students' Engagement and Enthusiasm for Reflection.' *Reflective Practice* 13 (5): 719–733.

Stover, S., and M. Vere. 2013. 'TPACK in Higher Education: Using the TPACK Framework for Professional Development.' *Global Education Journal,* 1: 93–110. *Global Education Journal* 1: 93–110.

Taylor, P., and J. Pettit. 2007. 'Learning and Teaching Participation through Action Research: Experiences from an Innovative Masters Programme.' *Action Research* 5: 231–247.

Thang, S.M., C. Hall, P. Murugaiah, and H. Azman. 2011. 'Creating and Maintaining Online Communities of Practice in Malaysian Smart Schools: Challenging Realities.' *Educational Action Research* 19 (1): 87–105.

Thomas, L. 2000. '"Bums on Seats"; or "Listening to Voices": Evaluating Widening Participation Initiatives Using Participatory Action Research.' *Studies in Continuing Education* 22: 95–113.

du Toit, P.H. 2012. 'Using Action Research as Process for Sustaining Knowledge Production: A Case Study of a Higher Education Qualification for Academics.' *South African Journal of Higher Education* 26 (6): 1216–1233.

Trevitt, C. 2005. 'Universities Learning to Learn? Inventing Flexible (e)Learning through First-and Second-order Action Research.' *Educational Action Research* 13: 57–84.

Underhill, J.L., J. Clarence-Fincham, and N. Petersen. 2014. 'Developing a Mentorship Programme for Junior Lecturers Working with Student Tutors at a South African University: Emerging Shifts in Pedagogy and Identity.' *Education as Change* 18 (2): 357–371.

Vassilis, T. 2009. 'Developing a Practice–Theory Model in Pre-service Teacher Education in Greece: The Implications of Action Research: A Case Study.' *Action Research* 8 (2), 153–170.

Wakefield, C.J. and J.W. Adie. 2012. 'Evaluating Sport Psychology Teaching through Action Research.' *Journal of Hospitality Leisure Sport and Tourism Education* 11 (2): 125–130.

Walsh, C.A., G.E. Rutherford, and A.E. Sears. 2010. 'Fostering Inclusivity through Teaching and Learning Action Research.' *Action Research* 8 (2): 191–209.

Walton, J. 2011. 'A Living Theory Approach to Teaching in Higher Education.' *Educational Action Research* 19: 567–578.

Ward, L.J. and K. Padgett. 2012. 'Developing a Service User Facilitated, Interactive Case Study – A Reflective and Evaluative Account of a Teaching Method.' *Nurse Education Today* 32 (2) 156–168.

Weaver, D., and A. Esposto. 2012. 'Peer Assessment as a Method of Improving Student Engagement.' *Assessment & Evaluation in Higher Education* 37, 805–816. doi:10.1080/02602938.2011.576309

Weber, E. 2011. 'Transforming Higher Education: Action Research, Learning and Community Politics.' *Africa Education Review* 8: 1–16.

Welsh, M.P. 2008. *Knowledge Creation through Engagement in a Personal Learning Environment.* New York: Springer.

Welsh, M.P. 2012. 'Student Perceptions of Using the PebblePad e-Portfolio System to Support Self- and Peer-based Formative Assessment.' *Technology, Pedagogy and Education* 21: 57–83. doi:10.1080/1475939X.2012.659884

Wisker, G., J. Tiley, M. Watkins, S. Waller, J. Thomas, and A. Wisker. 2001. 'Discipline-based Research into student Learning in English, Law, Social Work, Computer Skills for Linguists, Women's Studies, Creative Writing: How Can It Inform Our Teaching?' *Innovative Education & Training International* 38: 183–202. doi:10.1080/14703290110035455

Wrench, A., C. Hammond, F. McCallum, and D. Price. 2013. 'Inspire to Aspire: Raising Aspirational Outcomes through a Student Well-being Curricular Focus.' *International Journal of Inclusive Education* 17: 932–947.

Zambo, D. 2011. 'Action Research as Signature Pedagogy in an Education Doctorate Program: The Reality and Hope.' *Innovative Higher Education* 36: 261–271.

Zambo, D., S. Isai. 2012. 'Lessons Learned by a Faculty Member Working in an Education Doctorate Program with Students Performing Action Research.' *Educational Action Research* 20: 473–479. doi:10.1080/09650792.2012.697668

Zhang, Z., D. Fyn, L. Langelotz, J. Lonngren, L. McCorquodale, and J. Nehez. 2014. 'Our Way(s) to Action Research: Doctoral Students' International and Interdisciplinary Collective Memory Work.' *Action Research* 12 (3): 293–314.