



University of HUDDERSFIELD

University of Huddersfield Repository

Wormald, Jane, Brown, David, Skrbic, Nena and Terry, Rachel

'No research is insignificant': implementing a Students-as-Researchers Festival

Original Citation

Wormald, Jane, Brown, David, Skrbic, Nena and Terry, Rachel (2016) 'No research is insignificant': implementing a Students-as-Researchers Festival. *Widening Participation and Lifelong Learning*, 18 (1). pp. 74-89. ISSN 1466-6529

This version is available at <http://eprints.hud.ac.uk/27367/>

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.

<http://eprints.hud.ac.uk/>

‘No research is insignificant’: implementing a Students-as-Researchers Festival

There are increasing demands for Higher Education (HE) students to play a role in research-active communities and, similarly, for College Based Higher Education (CBHE) lecturers to develop their research practices. A cross-consortium Student Research Festival was designed to create a collaborative ‘community of discovery’ (Coffield and Williamson, 2011) and enable final year students to disseminate their research studies to a wider audience. The Festival drew on current HE pedagogies to build an open communicative space in which the three dimensions of practice architecture (Kemmis et.al., 2014) were embodied. The Festival was evaluated through a Collaborative Action Research project in order to establish how the sharing of research contributed to the participants’ identity as researchers. Data were analysed using the a priori categories afforded by the practice architecture framework. Valuable insights emerged into the students’ conception of research, as detached from the ‘real’ world and belonging to the privileged few. These views were challenged by the experience of the Festival, which narrowed the gap between student and researcher and unsettled existing roles. Recommendations include widening the scope of the Festival to include other stakeholders and embedding further research building opportunities in the undergraduate curriculum.

Key words: community of discovery, collaboration, College Based Higher Education (CBHE), students as researchers, action research

Introduction

As the research outputs of lecturers become increasingly important in both Further Education Institutions (FEIs) and Higher Education Institutions (HEIs), there is a parallel emphasis on enabling students to play a role in research-active communities.

This study presents an accessible and highly transferable theoretical framework modelled on a three dimensional architectural metaphor that was successfully contextualised to support the development of mid-career, lifelong learners in developing their student researcher identities. It is of particular interest to those wishing to build more expansive and genuinely democratic research engagement and participation within undergraduate courses that are connected to engaging with and influencing professional practices.

The concept of ‘student as researcher’, central to the undergraduate curriculum (Jenkins and Healey, 2009; QAA, 2014), has been integral to the development of this research festival project. Healey et al. (2014: 36) argue that ‘celebrating and disseminating the outcomes of final year projects’ is an essential part of engaging with wider audiences; they encourage the idea of ‘student as producer’.

The project to design a ‘festival of the mind’ involved collaborative partners teaching College Based Higher Education (CBHE) and working alongside a University centre. The objective was to disseminate and celebrate students’ final year research studies on a BA(Hons) Education Studies degree. Whilst aligning with current higher education strategies, the Research Festival also embodied the programme’s philosophical and pedagogical aims of developing collaborative thinking and action. Our central question was: how does the sharing of research with peers help form reflexive practitioners who feel able to ‘transform the present to produce a different future’ (Carr and Kemmis, 1986: 183)

The degree was re-designed in 2012 as a part-time two-year blended learning programme combining college and university cohorts in regional 'day schools'. The undergraduates are mostly mid-career teachers or trainers employed in vocational areas. The conceptual framework for the course is predicated on teaching and learning as a collaborative and expansive enterprise. It is reflected in the course philosophy with its intention of developing reflexive practitioners who shape and influence policy and its implementation within a changing professional context.

The inaugural 'Students as Researchers' Festival (2014) had seventy-two attendees with forty-three student presentations, a keynote speaker and a 'writing for publication' workshop. Small 'critical dialogue spaces' were facilitated between themed strands of presentations to interrogate what had been heard. Our use of the phrase 'critical dialogue spaces' originated from a phrase used at the Collaborative Action Research Network (CARN) conference organised by Torbjørn Lund and Stephen Kemmis in 2013. It is an amalgam of three terms. The word 'critical' is taken from the notion of critical participatory action research, which aims to facilitate reflection on the "character, conduct and consequences" of participants' social or educational practices (Kemmis et.al., 2014: 16). 'Dialogue' references Lund's idea of 'dialogue conferences' where attendees come together and through discussion "bring new ideas into action" (Lund, 2008: 175). 'Spaces' originates from Habermas' notion of open communicative space (Kemmis et.al., 2014). From this, Kemmis et al (2014) developed the concept of 'practice architecture' (Kemmis et al., 2014) with its three mutually dependent dimensions: the 'sayings' (exchange of ideas) of the participants; the 'doings' (key notes, papers and informal spaces) of the Festival; and the 'relatings' (social dynamics) of those involved. We contextualise these concepts later.

In order to evaluate the festival and improve its next iteration, student experiences were gathered through a small-scale action research study. This allowed us to investigate the design we had implemented, and its sustainability, in a collaborative way.

This article considers first the background and purpose of our research design, then its methodology, the results of an online questionnaire and our findings. Finally, the value of the analysed data is explored in order to enhance future iterations of the festival.

Students as researchers: policy, philosophy and practice

The Higher Education Review: First Year Findings report analyses the reviews conducted in England by the Quality Assurance Agency (QAA) during the academic year 2013-14. The following examples of good practice in 'Student Involvement' emerge from the report: (1) students presenting at a collaborative best practices conference; and (2) students working collaboratively with staff on research projects (QAA, 2014: 18). These examples focus on the development of a culture of research and scholarly activity that clearly supports "a higher education ethos among staff and students" (QAA, 2015: 14) and gives confirmation of the Festival and our subsequent collaborative research in acting to facilitate these practices.

The philosophy of the BA also subscribes to the idea that the value of undergraduate research in education studies is in its usefulness and applicability to

real life practice problems. In this study, the students' research modules, in particular, are predicated on the fact that '...the teacher is surrounded by rich research opportunities' (Stenhouse, 1980). Students are urged to consider the similarities between the work of the educational researcher and the practice of teaching, whilst tutors model this practice. David Barton argues that 'teachers' routine work can be seen as research-like in many ways' (2005) and we agree that the teacher's work is pregnant with possibilities.

Disseminating the students' research studies was made possible by the festival itself and also in other social spaces for informal interaction, which are recognised as important in establishing an effective community of practice (for example, Bourdieu, 1985; Wenger, 1998) especially within blended learning programmes (for example, Kreijns et al., 2007; Fisher et al., 2007). Discussions on the 'blend' of face-to-face and online activity in courses designed for higher education emphasize the danger of not attending to the 'social' element of learning (Garrison and Vaughan, 2008). Most notably, blended courses are often strong in the presence of teaching and cognitive elements online but frequently ignore social interaction and the socio-emotional needs that students identify as important (Kreijns et al., 2003). The Higher Education Funding Committee England (HEFCE) and the literature (David et al., 2008; Crozier et al., 2008) also found promotion of social opportunities encourages peer support and new learning. However, blended designs often assume that social and interactive discussion either will happen organically, or it is not sufficiently considered. Garrison and Vaughan's community of inquiry (CoI) framework captures the three essential elements of social, teaching and cognitive presence:

Place Figure 1

The CoI is a formally constituted group, connected through academic and collaborative activity to work towards shared goals. Expertise and knowledge are shared, yet in the social domain it is essentially about sustaining adhesiveness, belonging and mutual support. This then allows a sharing of ideas and testing of one's own thinking through creative expression, that can then enable an awareness of differing perceptions or experiences. The teaching presence in this context '...establishes the curriculum, approaches, and methods; it also moderates, guides, and focuses discourse and tasks. It is the means by which to bring together social and cognitive presence in an effective and efficient manner' (Garrison and Vaughan, 2008: 24). The CoI complements another influence in this project, that of 'communities of discovery'.

The nature of sharing, discussing and debating is vital to the whole course design and central to promoting the 'student as researcher' from the outset. Coffield and Williamson (2011: 10) assert that dialogue, through an online 'community of discovery', plays a central role in promoting knowledge as a collective resource. In this course, dialogue is where students and tutors exchange 'really useful knowledge' (Avis, 2004: 22). This type of democratic and participatory culture, with knowledge as a central and collective resource, creates 'expansive' learning environments (Coffield and Williamson, 2011: 10). These communicative elements are also seen as integral in the architecture of the festival as a site to disseminate, absorb, reflect and discuss new research ideas and outcomes from varying educational environments. The

actors are the students as researchers, peers as co-learners and tutors and speakers to enable and generate discussion.

The Research Festival seeks to create an open communicative space in which the three dimensions of practice architecture (Kemmis et al. 2014), a theory of practice, are embodied. That is, the 'sayings' (exchange of ideas of those involved) of the participants are nurtured through the 'doings' (key notes, papers and informal spaces) of the Festival, so the 'relatings' foster inclusion and thus renew and extend 'the community of discovery' (Coffield and Williamson, 2011).

Place Figure 2

At the site of the Festival, critical dialogue spaces (Kemmis et al, 2014) were instigated to encourage purposeful dialogue about the research to extend beyond immediate horizons, beyond transactions of information, to promote curiosity and the ability to collectively expand educational thoughts and ideas. Coffield and Williamson (2011: 30) also highlight that 'dialogue, trust and respect' is needed to encourage 'shared solutions to collective problems' and this is central to the purpose of critical dialogue spaces.

Critical dialogue followed each band of student presentations, enabled (rather than led) by a lecturer. At the festival site, the purpose for the dialogue, founded in Habermas' (1984) argument, was that of free, open communication so we can further understandings; we can engage in mutual understanding of the 'sayings' and 'doings' that have occurred through the 'relatings'. Inherent in this process, is the possibility of enabling potential change as we exchange new ideas, knowledge and insights. In this way, participants become active thinkers and doers, rather than passive consumers.

These four theoretical frameworks of practice architecture (Kemmis et al., 2014), CoI (Garrison and Vaughan, 2008), community of discovery (Coffield and Williamson, 2011) and critical dialogue spaces (Kemmis et al., 2014) worked well to conceptualise the research festival. Participants are research-active practitioners, expansive in their ability to disseminate and share outcomes and practices. The central values of collaboration and discovery that are integral to the 'blend' of learning on the BA(Hons) course also include reflexive consideration of socio-political arrangements, essential to graduate understanding (QAA, 2015).

Methodology

The aim of the research project was to find out whether the practice of the festival - and the students' experience of it - confirmed our deeply held beliefs about its value. We were strongly aware of our practical and emotional involvement as 'insiders' (McNiff and Whitehead, 2011: 8) in the study, as all four researchers acted as organisers and facilitators of the festival. We were also alert to the values informing our ontological position; in particular, the belief that 'learning will transform into purposeful personal action for social benefit' (McNiff and Whitehead, 2002: 17). This notion of 'purposeful personal action' was as applicable to our own learning as to that of the students on three separate levels: personal, professional and organisational.

Through the framework of Collaborative Action Research (CAR), we adopted a ‘cogenerative’ mode of enquiry (Levin and Greenwood, 2011: 29) which brought together key actors for the purpose of enacting change. Professional researchers (CBHE and HEI lecturers) worked with local ‘stakeholders’ (students) to explore possible solutions to practice problems. In this instance, the specific areas of interest were as follows: (1) student satisfaction; (2) impact and transferability; (3) implications for future practice, including sustainability; and (4) professional identity.

Data collection, conducted in the summer of 2014, was primarily dictated by practical considerations. An online survey was circulated via email to the forty-three students who presented their research at the festival, nineteen responses were received within our fourteen day study window. SurveyMonkey®, a cloud-based software tool, was selected due to its free availability and its frequent use in current online research. Sue and Ritter (2012) confirm the economic and practical advantages of the email survey, recognising its convenience, simplicity and speed. These were crucial considerations given the wide geographic dispersal of our survey population. Anonymity and voluntary informed consent (BERA, 2011) were fully maintained and the survey was piloted prior to circulation, subtle adjustments to the wording and response categories for three of the ten questions were made.

Due to the on-line nature of the data collection tool, the data collected and the resulting claims we make do not necessarily represent the views of some potentially marginalised stakeholders (Abma and Widdershoven, 2011) who are less engaged in on-line activities. The resultant conclusions should be read with this in mind.

Primary analysis and categorisation

The questionnaire sought text-based and qualitative information for the most part, rather than numerical measurement. We wanted to understand individuals’ perceptions of the festival and – in the spirit of qualitative research - discover the meanings that they attached to the event.

Place Table 1

The analysis takes an interpretivist approach focussing on the words used by participants, which offer meaningful insights by themselves. We then examined the dataset for recurring discourse patterns relevant to the foci of this very small-scale study. Working in accordance with Braun and Clarke’s (2006: 79) six-phase classification we generated some initial codes; that is, we applied brief verbal descriptions to small segments of the data. We wanted to capture specific ideas associated with each segment. These multiple codes were then combined to create themes. Given the number of statements – some 94 – we have made no attempt to refer to each one individually, but have preferred to concentrate on following a line of argument, using the most appropriate statements as illustrations. Participants indicated their responses to questions 2, 3, 5 and 8 along Likert-type scales (a unidimensional scaling method) ranging from Strongly Agree to N/A.

The triad: sayings, doings, relatings

The 10 survey items were conceptually categorised under the headings 'sayings', 'doings' and 'relatings', which reflect the emphases of the research. The triad, shown in table 2 below, was used to examine each response:

Place Table 2

The way in which participants positioned themselves as researchers was a recurring concept across the dataset. Preliminarily, responses to question 1 - closely tied to the supporting statements given in response to question 4 - raise interesting speculations about the proper basis for deciding on the meaning of research and, chiefly, the question of whose research has value. The responses are closely tied also to traditional notions of use-inspired research as somehow hierarchically inferior to published 'academic' research or theoretical knowing (Stokes, 1997). For one respondent, academic research is viewed as the province of the "esteemed" academic (Q1), which raises a number of questions about intellectual authority and relevance: Who decides, and on what grounds, whether a piece of research has value? Who has a monopoly on transmitting knowledge (the sayings)? Who gets to determine or legislate on matters of knowledge (theoretical and/or practical)? Obviously, for this respondent, "esteemed academics" have set themselves up as arbiters of these questions. Indeed, across the survey, participants emphasised the same dichotomy between academic and real-world research: "I always felt that published research was on a pedestal, something only people with superior and special knowledge could create" (Q7). Respondents return persistently to this sense of liminality, a sense of eavesdropping on the 'real' researchers. This sense of marginalisation and detachment is an important undertow of the data, as is the sense of fictional distance from the researcher, implied in one respondent's comment that s/he now sees researchers as "real people".

More interesting yet, is the participants' self-concept and orientation to research. It became apparent that most conceptualised research as separate from their role as student. Some questioned the authenticity of their own experience or knowledge-in-practice - the culture as it is understood by the participants "at grass roots level" (Q7). One response encapsulates this concern: "I was always of the belief that my research didn't matter - that it was solely for the purpose of an assignment module. But people really were interested in what I had to say and deliver" (Q4).

Then there are responses, which reveal a sense of uncertainty - self-consciousness even. Survey data illuminated feelings of self-doubt across the sample. The following excerpt best describes the position in which the student-researchers in this sample find themselves:

It's about widening experience to increase confidence, I never believed that at my level of study that my research would be worthwhile so without the opportunity 'on a plate' as such, I would have never actively and independently sought to share my undergraduate research. However the experience was so positive and had such an impact on my self belief (although still modest and aware of my status as a novice researcher, understanding how much more there is for me to learn). I hope to try and publish my findings, as well as develop other ideas I generated on the BA into papers also (Q4).

What interests this respondent, then, is the way in which their research has been made “worthwhile”. But the quote is just as interesting for the perspective that it provides on “self-belief” – the affective domain of the triad. Participants generally constructed statements about themselves that positioned them as inexperienced researchers doing unexceptionable work. This became a metaphor throughout the survey data since it captured the definitions of more than one participant. Pertinent here is one respondent’s claim that: “Yes as previously didn’t understand the importance of research but now I am aware of the process and value of carrying out research in daily teaching roles and that I can continue to do it” (Q7). Respondents acknowledge, “feeling valued” (Q1) for the research that they had undertaken. These observations find a counterpoint in the following response to Q4: “The role of student as researcher was an empowering position that gave me the feeling of permission to allow legitimate engagement with research and for my research to be taken seriously” (Q4).

Context (or ‘doings’, the second part of the triad) is a particularly important metaphor in the data. The physical location - or “research festival environment” (Q10) - contributes a crucial symbolic element to the meaning of the event. Specifically, this includes the “experience of the university” and “feeling part of something special”. This sense of connection and “community” is always present as a factor since much of the data conveys the importance of a physical connection between the research and the researcher. For the most part, respondents are concerned to promote the idea that research is not undertaken in isolation, but draws on the stimulus of others. Several respondents alluded to the importance of “communication with peers” and “group discussion”. One respondent commented on the physical connections established between the research and the researcher, valuing the opportunity “to meet successful academics whose research I had read” (Q1).

Of course, this focus on community raises supplementary questions about “voice”. For one respondent, the festival was a means of unifying multiple voices and s/he foregrounded the importance of “unity between participants with regards to issues in education” (Q1). Here, the theme of intellectual authority (or speaking with the right kind of voice) emerges once again. The point is trenchantly made by one respondent: “Do not be afraid to have your voice heard and be assured that you are making a valid contribution” (Q1). This is returned to by the following participant: “The validity of students’ research was embedded through the festival” (Q7). Here, again, legitimacy is the central point, along with the fact that educational research does not privilege any one voice, but invites any number of voices and many types of tellers.

Overt roleplaying was an important leitmotif in the data. There are numerous references in the data to a role that is being enacted, whether as teacher, student or researcher, implying a separation of these functions. In the data, references to inhabiting a role emerge: “...whilst I was in the role of student I felt I was contributing to the field of research in the area” (Q4). Another respondent highlights the “value of carrying out research in daily teaching roles” (Q7). References to role-playing also underpin advice to future participants to “be yourself” (Q10) on the day. For some, the festival resulted in a significant shift towards developing (or, in some cases, sustaining) a believable identity as an educational researcher. Pertinent here is one respondent’s claim that: “The discussions held with my peers provided me [with] the affirmation that as a ‘Student as researcher’ I have been able to support my trainees with differing types of learning

resources such as the introduction of the use of technology to enhance the learning process (Q4).

In our attempt to discover what distinctions, and what similarities, might be discerned in the data, we have found out a great deal about how the festival was subjectively experienced. For example, one respondent, stated: “Though the thought of presenting can sometimes seem very daunting, the benefits of participating in a research festival ultimately outweighs any negative feelings you may have. Towards the end you may wish for it to continue”. (Q10) This is an inspiring view of the festival and the value of participation, but what is felt more strongly is the respondent’s sense that the gap between the student and the researcher is not an unbridgeable one. In this connection, and in the words of one participant, “No research is insignificant” (Q7). Another respondent who stated that all participants should be given “an opportunity to publish their research” accentuates this point. What stands out is the fact that, through attending the festival, respondents have come to view participating publicly in educational research as something not altogether unobtainable.

Recommendations and conclusions

Without making any inappropriate claims for the findings, the research generated insights on participants' feelings about the value of research-informed knowledge, the identity of the researcher and perspectives on the culture of research. In the end, the mechanics of writing and presenting appear a secondary consideration to the valuable metacompetences forged. In short, the festival had significances beyond the supposed intentions of the organisers.

The following recommendations, allied with our short and long-term sustainability strategies, are proposed and have implications, not only for the future design of the festival, but the strategic development of the curriculum:

1. Identify measures to maximise the intervention's long-term impact through a student researcher peer-to-peer support network or online undergraduate research community.
2. Help students to make the transition to use-inspired basic research, particularly in College Based Higher Education (CBHE), by building further opportunities for student-guided research into the undergraduate curriculum.
3. Take deliberate steps to evaluate the impact of the festival on the enhancement of undergraduate learning, including the impact of research-based practice on the quality of teaching and learning within the students' own contexts.
4. Extend existing partnerships with employers to determine the collective impact of practitioner-based research within the professional communities in which our students work and build institutional support.
5. Embed an undergraduate peer-reviewed research publication in the undergraduate curriculum.
6. Develop mentoring relationships with faculty to sustain commitment to practitioner research and evidence-based theory after the programme.
7. Explore ways in which students might receive credit for their research experiences through a Student Researchers Programme that connects undergraduate students with faculty seeking assistance with real research projects.

Our plan for sustainability - accommodated within and balanced against global, national and local priorities for undergraduate research - will ensure that this collaborative intervention is self-sustaining. As highlighted in the introduction to this article, the festival complements local and national objectives for professionally-oriented undergraduate research, which has helped to build internal support for the intervention and credibility. However, we are committed to building collaboration for the intervention and attracting external support. Outputs and outcomes will be used as marketing tools and the festival's successes will serve as outreach tools to ensure further support and employer engagement. Further evaluation will highlight aspects of the intervention that we plan to sustain and improve and which will inform the development of the project. To that end, we will continue to document impact and have established baseline data that can be used to demonstrate significant change for at least three years.

For the students, the significance of the celebratory 'festival' was highlighted in the insights gained through the focused, critical discussions (as opposed to traditional questions and answers). The dialogic focus promoted reflexivity which, thereby, enabled deeper cognitive and affective understandings. The critical dialogue, as opposed to general discussion, extended each participant's ability to articulate ideas about their own and others' research. The impact of individuals identifying as active student- and practitioner-researchers transcended beyond the expectations of the festival organisers.

References

- Abma, T. A. and Widdershoven, G. A. M. (2011) 'Evaluation as a Relationally Responsible Practice' in N.K. Denzin and Y. S. Lincoln (eds) *The Sage Handbook of Qualitative Research*, 669 – 680. Thousand Oaks: Sage.
- Avis, J. (2002) 'Really Useful Knowledge? Evidence-informed Practice, Research for the Real World', *Post 16 Educator*, 8: 22-24.
- Barton, D. (2005) 'Teacher Researchers', *Reflect online*, 2 (online) Available at: <http://www.nrdc.org.uk/content.asp?CategoryID=579>
- Braun, V. and Clarke, V. (2006) Using Thematic Analysis in Psychology, *Qualitative Research in Psychology* 3, 2: 77-101.
- British Educational Research Association (BERA). (2011) *Ethical Guidelines for Educational Research*, London: BERA.
- Bourdieu, P. (1985) 'The Social Space and Genesis of Group', *Theory and Society*, 14, 6: 723-744.
- Carr, W. and Kemmis, S. (1986) *Becoming Critical: Education, Knowledge and Action Research*, London: Deakin University Press.
- Coffield, F. and Williamson, B. (2011) *From Exam Factories to Communities of Discovery*. London: Institute of Education, University of London.

Crozier, G., Reay, D., Clayton, J., Colliander, L. and Grinstead, J. (2008) 'Different Strokes for Different Folks: Diverse Students in Diverse Institutions – Experiences of Higher Education'. *Research Papers in Education*, 23, 2, June: 167-179.

David, M., Parry, G., Vignoles, A., Hayward, G., Williams, J., Crozier, G., Hockings, C. and Fuller, A. (2008) *Widening Participation in Higher Education*. London: Teaching and Learning Research Programme.

Fisher, K., Landry, C. and Naumer, C. (2007) Social Spaces, Causal Interactions, Meaningful Exchanges: 'Information Ground' Characteristics based on the College Student Experience, *Information Research*. 12, 2: paper 291.

Garrison, D. and Vaughan, N. (2008) *Blended Learning in Higher Education: Framework, Principles, and Guidelines*, San Francisco: Jossey-Bass.

Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P., Trow, M. (1994) *The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies*, London: SAGE.

Habermas, J. (1984) *The Theory of Communicative Action. Volume 1: Reason and the Rationalization of Society* (transl. T. McCarthy), Oxford: Polity Press.

Healey, A., Jenkins, A. and Lea, J. (2014) 'Developing Research-based Curricula in College-Based Higher Education' (Online) Available at:
https://www.heacademy.ac.uk/sites/default/files/resources/developing_research-based_curricula_in_cbhe_14.pdf

Jenkins, A. and Healey, M. (2009) 'Developing the Student as a Researcher through the Curriculum' in C. Rust (ed), (2009) *Improving Student Learning through the Curriculum*. Oxford: Oxford Centre for Staff and Learning Development, 6-9.

Kemmis, S. and McTaggart, R. (2000) 'Participatory Action Research' in N. Denzin and Y. Lincoln (eds) *Handbook of Qualitative Research*. London: Sage.

Kemmis, S., Wilkinson, J., Edwards-Groves, C., Hardy, I., Grootenboer, P., and Bristol, L. (2014) *Changing Practices, Changing Education*. London: Springer.

Kreijns, K., Kirschner, P. and Jochems, W. (2003) 'Identifying the Pitfalls for Social Interaction in Computer-Supported Collaborative Learning Environments: a Review of the Research', *Computers in Human Behavior*, 19: 335–353.

Kreijns, K., Kirschner, P., Jochems, W. and van Buuren, H. (2007) 'Measuring Perceived Sociability of Computer-Supported Collaborative Learning Environments'. *Computers and Education*, 49: 176-192.

Levin, M. and Greenwood, D. (2011) 'Revitalising Universities by Reinventing the Social Sciences' in N. K. Denzin & Y. S. Lincoln (eds), *The Sage Handbook of Qualitative Research*, 27- 42. Thousand Oaks, Sage.

Lund, T. (2008) 'Action Research through Dialogue Conferences' in Rönnerman, K., Moksnes Furu, E. and Salo, P. (eds), *Nurturing Praxis: Action Research in partnerships between School and University in a Nordic Light*. Rotterdam: Sense Publishers, 175-192.

- McNiff, J. and Whitehead, J. (2002) *Action Research: Principles and Practice* (2nd ed), Abingdon: RoutledgeFalmer.
- McNiff, J. and Whitehead, J. (2011) *All you need to know about Action Research*. London: Sage.
- Organisation for Economic Cooperation and Development. (2002a) *Frascati Manual: Proposed Standard Practice for Surveys on Research and Experimental Development* (6th ed), Paris: OECD.
- Organisation for Economic Cooperation and Development. (2002b) *Educational Research and Development in England*, Paris: OECD.
- Organisation for Economic Cooperation and Development. (2003) *New Challenges for Educational Research*. Paris: OECD.
- Quality Assurance Agency [QAA]. (2014) *Higher Education Review: First Year Findings 2013-14*, Gloucester: Quality Assurance Agency.
- Quality Assurance Agency [QAA]. (2015) 'Subject Benchmark Statement: Education Studies', (Online) Available at: <http://www.qaa.ac.uk/publications/information-and-guidance/publication/?PubID=2916#.VTC5Jje7wx>
- Stenhouse, L. (1980) What Counts as Research? Draft for discussion paper. (online) Available at: <https://www.uea.ac.uk/documents/4059364/4994243/Stenhouse-1980-What+counts+as+research.pdf/416a405d-4e84-46a0-b4d9-cbd31815ade7>
- Stokes, D. E. (1997) *Pasteur's Quadrant. Basic Science and Technological Innovation*. Brookings Institution Press: Washington, D.C.
- Sue, V. M. and Ritter, L. A. (2012) *Conducting Online Surveys*, Thousand Oaks: Sage.
- Wenger, E. (1998) *Communities of Practice: Learning, Meaning and Identity*, Cambridge: Cambridge University Press.