A four-phase working methodological model for conducting action research

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This article details a four-phase working methodological model for action research that I have found useful as a librarian new to action research. The flexible model provides guidance on the methodological model as part of the research process. The article applies the model to the question of how to motivate Art and Design students to research using their library. In doing so, the article highlights the multitude of possible elements that both underpin and might best respond to library under-use among Art and Design students.

Introduction

This article details a four-phase working methodological model designed to guide a researcher through the process of action research. Carr et al. (1986, quoted in Atkins & Wallace 2012: 126–7) define action research as 'a form of self-reflective enquiry undertaken by participants in social situations'. They state how it can be seen to focus on 'improving practice', 'improving understanding of practice' and 'improving the situation in which practice takes place'. Atkins & Wallace (2012: 126) say how in contrast to this definition, action research relates 'less to a process and more to a philosophy' that 'emphasises social change as an outcome of research'. The Carr et al. definition captures the scope of this present article. However, it is conceded here that this definition of action research does not incorporate much of the meaning assigned to the term by others.

As an example, this model uses an action research project concerning the motivation of Art and Design students to conduct research using their university library. As such this article may firstly be of interest to anyone engaging in action research. Secondly it might be relevant to anyone tackling such motivational issues, whether inside or outside of librarianship. The Educational Research project was conducted as part of a Postgraduate Certificate in Learning and Teaching in Higher Education. I work as an academic librarian, so the action research was situated in a librarianship context. A first caveat to raise is that I am new to action research. As such I am prepared to adapt the model as I conduct further research and engage further with relevant theoretical work. I therefore refer to it as a working model. A further caveat is selectivity: this working model is one that contains aspects that I find useful and excludes those I have not yet found useful. However, what constitutes helpful omissions for myself may not do so for others.

Detailing the four-phase methodological working model

Phase 1

The model in question is displayed in Table 1. The first phase of looking and the second of thinking are drawn from Stringer's action research interacting spiral (2007: 9) (referred to here as 'Stringer's model'). Stringer's model itself entails an iterative process of looking, thinking and acting. Nested within the looking component, and providing guidance on how to look, is Tripp's (2012: 24–7) concept of a 'critical incident'. Rather than emerging pre-formed these incidents are constructed by the researcher in response to their context. When something with wider significance for a professional is discovered, a critical incident is generated. I generated three critical incidents. Firstly, I recognised my limited exposure to pedagogic theory through my Library Postgraduate qualification. Secondly, I recognised my failure to devote enough time to reflection on my practice. The wider significance here is that with inadequate exposure to pedagogic theory and self-reflection, my whole professional practice could suffer owing to potential for improvement being unrecognised. Thirdly I recognised a theme of a reluctance to use the library among Art and Design students. In the past, students had commented on their lack of interest in theoretical study, saying that it takes them away from doing practical activities. This sentiment could perhaps partially explain why a research-focused library session was uninteresting.

[Insert table 1]

Phase 2

Following this Stringer- and Tripp-guided process of looking, the second phase is the Stringer-guided process of thinking (Stringer 2007: 9). The generic term 'think' is broad enough to open the researcher to whatever kind of mental activity or activities the specific critical incident might warrant. For example, a researcher might be prompted by their looking to form an initial idea for a response. Or they might be prompted to investigate pre-existing scholarship related to the issue to better understand what it is they have seen. However, the term is still defined enough to provide some orientation. Brookfield's lenses (1998) are nested within the working model in phase 2.1. There are four foci proposed by Brookfield (1998) which encourage the researcher to be comprehensive in their thought: 'the researcher's own autobiography', 'the learner's eyes', 'colleagues' experiences' and 'theoretical literature'. In my own case, the phase 1 looking activity caused me to think with Brookfield's (1998) foci of the learners' eyes and colleagues' experience. With respect to learners' eyes, in a creative-course committee, students expressed curiosity about tutor

activity. Also, from my prior interactions with students I knew that there is an appetite for resources that can be accessed remotely. With respect to colleague experience, there is a desire to offer students an enriching cross-discipline exposure. In my case that felt sufficient for phase 2.1. This demonstrates that the working model is only a guide. In my case I was ready to progress without a full engagement with all Brookfield's (1998) foci. However, phase 2.1 exists to remind researchers of the potentially fruitful results of following Brookfield's foci when reflecting. I progressed to phase 2.2, 'ideating and planning', in which an idea suggested itself that addressed the issues. This idea is expressed in the below objectives:

- Objective 1: Within a library induction for art students, prior to instructional content I would normally deliver, I will perform a pilot dialogue with one or two staff tutors. This dialogue will include a discussion of the tutors' creative practices before establishing what they would like to research more. I will then use the library to find some potentially relevant resources. Based on their response I will again try and locate something useful for their creative practices. A second section of the pilot library induction will demonstrate how research can enrich students' own practices.

- Objective 2: After the pilot I will conduct another dialogue with a larger group of tutors from a range of creative disciplines. This will be recorded and published online.

Phase 3

The researcher can now enter the third phase of the selection of a methodological sub-model (referred to as a 'sub-model' owing to the way it is slotted into my own working model). As Table 1 shows, this is achieved through various criteria. A first criterion used to determine applicability is situational openness. The fewer constraints there are in a project, the more appropriate do generic methodological frameworks become as the project could unfold in a wider variety of ways. My own project was relatively well defined already because one pre-existing aspect of my context was the need for a meeting with students. This made certain models more relevant than others. As already mentioned in Stringer's action research interaction spiral, the loosely defined 'Look' and 'Think' precedes action (2007:9). This evokes a wider possible range of preparations than the situational planning I already knew I was working towards. As such I looked away from Stringer's model (2007: 9) in favour of models with more specific terminology. For example, Lewin's action research spiral (Mertler 2013: 15), Bachmen's action research spiral (Mertler 2013: 17), Riel's action research spiral (Riel n.d.) and Mclaughlin's model of action research (Check & Schutt 2012: 265) all detailed a planning phase. The next criterion is the degree of potential for evolution.

Action research frameworks are typically cyclical, reflecting the way projects require iterative development. Some models are circular in form, suggesting a gradual refinement as successive cycles share graphical space. In contrast, a spiral structure suggests a greater degree of evolution given that successive cycles do not occupy the same graphical space. Because my project was a new endeavour, I was not dealing with a well-established project requiring gradual refinement. Accordingly I restricted my attention to models with a spiral structure rather than models with a circular structure. As such, a model like Mclaughlin's model of action research (Check & Schutt 2012: 101) was disregarded. To further discriminate, the present working model asks researchers to consider research intensiveness. Riel's action research spiral (referred to here as 'Riel's model') (n.d.) specifically makes provision for study which made it explicitly research-intensive. This contrasts with other models. For example, Lewin's action research spiral (Mertler 2013: 15) includes the phase of 'Identifying a General or Initial Idea'). This could apply to situations where research might already have been gathered and the process was mainly reflective and analytical. The 'study' term used in Riel's model (n.d) was also more explicitly research-intensive than Bachmen's action research spiral. The Bachman model (Mertler 2013: 17) entails an iterative process of 'Plan', 'Act and Observe', 'Reflect', and then 'Revised plan' As such, at this point I adopted Riel's model (n.d.). Riel's model consists of successive cycles, each one involving four phases: 'Study and Plan', 'Take Action', 'Collect and Analyse Evidence' and 'Reflect'. Table 2 shows the working model with Riel's (n.d.) iterative process of action research used as a sub-model in phase 4.

[insert table 2]

Phase 4

Researchers reaching phase 4 begin at the point in the selected sub-model which best represents the current point in their research process. In my case phase 4.1 this was 'Study and plan'. Brookfield's (1998) lenses are embedded in all subsequent reflection and analysis to guide the processes, regardless of which framework is selected. In my case this meant that Brookfield's (1998) lenses were nested within the 'Collect and analyse evidence', 'Reflect' and 'Study' phases of Riel's (n.d.) iterative process of action research. As already described, there are four foci proposed by Brookfield (1998) which encourage the researcher to be expansive in their analysis and reflection. In phase 2.1 I had already applied some of these lenses into the study and plan section. In phase 4.1, following Riel's model (n.d,) I conducted a literature review which in my case supported what I had been hitherto considering. To continue detailing my project I shall now move to the literature review aspect of my action research project. Bennett (2006: 38) argues that

two of the most difficult groups of Students to draw into the Library are the studio Art and Architecture Students. These Students often do not regard the Library as logically fitting into their studio projects or coursework.

This echoes the comments I received from the illustration student reflecting a disinterest in research. Objective 3 involved drawing in practitioners from a wide range of disciplines. This responded to the interest in exposing students to activity outside of their core disciplines. Wilgeroth (2016: 2) also supports this impetus in a case study improving undergraduate Art and Design education at Cardiff Metropolitan University. Part of the revised curriculum was a cross-disciplinary project. Wilgeroth emphasises the way students can 'learn a great deal from … how the various disciplines approach problem solving in very different ways'. It is this exposure to different approaches that this inquiry also seeks to foster. My current objectives also involved making the dialogue available online. This was informed by my experience of an appetite for resources that can be accessed remotely. Maness (2007: 44) has researched instructional materials of academic librarians made available online. In his case study at Gemmill Engineering Library at the University of Colorado he found that the videos were used significantly, suggesting that remote access sometimes constitutes a point of need.

Within 4.1 in the 'Study and plan' section of Riel's model (n.d.) I produced a concrete action plan for the specifics of the pilot. I then moved to phase 4.2, 'Take action', which was the carrying-out of the pilot. Phase 4.3 is 'Collect and analyse evidence' and phase 4.4 is 'Reflect'. Both these incorporate Brookfield's (1998) lenses. In my case these stages were addressed simultaneously in my consideration of the pilot. When considering the inquiry through colleagues' eyes, post-pilot conversations with tutors formed the evidence base. The library content I had delivered was deemed appropriate and the student engagement had appeared useful. The tutors and I agreed that attention was high. My remarks about approaching essay writing were well received by the tutors. Turning to Brookfield's (1998) lens of the researcher's own autobiography, one point of reflection is the decision I took to follow the discussion of tutor practice with a more in-depth than usual discussion of student practice. The circumstances of the session were more conducive to the more in-depth discussion of a student's practice. This was because I had the benefit of the tutor's presence which allowed the session to go into more depth about the student's own practice than I can achieve in a usual library session. When viewing the session through the learner's eyes, I noted that the students seemed relaxed, possibly given the session being hosted in their own studio, and the conversation not being entirely based on unfamiliar library matters. Informal questions to the group revealed that the students felt the session had prepared them for library use. The final lens of Brookfield (1998) is Theoretical literature. At this point I thought back to the literature review. Bennett (2006: 38) observes that students have difficulty seeing how the library and research logically relate to their artistic work. Zanin-Yost

& Tapley (2008: 40) also raise the issue of art students needing to connect research and learning. In response it is suggested that librarians can engage in a collaborative research process with tutors to identify points of intervention (Zanin-Yost et al. 2008: 42–3). The aspect of Zanin-Yost et al. I am concerned with is the collaborative relationship between librarian and tutor. A similar process occurred for me as the enhanced discussion of student art practice allowed the content of the tuition to be integrated with student projects. Collaboration between librarian and tutor was being undertaken for greater insight. It was the presence of the tutor that helped achieve the greater depth. Insight emerged into student practice that provided examples to use for library tuition. The idea that library tuition could be more enthusing if it was made relevant to practical concerns is encapsulated by Honey & Mumford (1982) who delineate the pragmatist learning style. Learners who exhibit this style learn effectively when content taught is presented so as to reveal how it can be applied.

I then moved to phase 4.5 which was the second cycle of Riel's model (n.d.): 'Study and plan'. This entailed me reformulating the objectives based on the pilot. The pilot's success left the objectives largely unchanged, except firstly for the amendment to pursue it in the studio if possible. This owes to the perceived benefit of enhancing student comfort. As mentioned above, Bennett (2006: 38) observed that students have difficulty seeing how the library and research logically relate to their artistic work. Embedding the session in the student's regular environment is arguably a way of effectively drawing the library into a direct relationship with the student's own practices. In response to the success of my attempt to focus for longer on student practices, I decided that the library information literacy session will provide a live demonstration of how research can enrich students' own practices. This is again informed by Bennett (2006: 38) who saw that students struggle to see how research logically relates to artistic work. With a more in-depth discussion of their practices, the tuition that I offer on the library will be geared towards helping students discover information that will aid their practice. In turn this will remove the difficulty of relating research to practice that Bennett highlights. As shown in Table 1, phase 4 has no pre-given end point, given the iterative nature of action research where projects are refined and evolve. In my case at the time of writing I had reached the point at which the next stage would be the next taking action phase within Riel's model (n.d.) in cycle 2.

Conclusion

Spurred by the challenge of navigating the methodological literature relating to action research, this present article details one such navigation that I have found productive for my own investigations. This is despite it being provisional and partial in its engagement with methodological literature. It is hoped that others new to research may find this model helpful,

potentially as something to build upon or potentially as an example of the way that methodological literature can be responded to. The article also engages with the challenge of motivating creative students to research using the library. In response it has revealed the multitude of possible elements that might both underpin and best respond to such reluctance.

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