Contents

Four contexts of action research:
Crossing boundaries for productive interplay

Gertjan Schuiling, Hans Vermaak

Abstract

This paper explores how action research takes place within and between four contexts: adding practical value, improving institutions, developing professions, and contributing to theory. We argue that action research is more than those activities conducted within these contexts: it is a process of handling the generative tensions in the boundary regions. Framing action research this way has proven helpful in recasting such tensions as meaningful, in thinking through research designs in teaching and practice, and in paying sufficient attention to boundary work. This model for conceptualising action research has been refined over two decades of practice and reflection by the authors.

Key Words: Action research, context, tension, contradiction, boundary work, design

Cuatro contextos de investigación acción: Cruzando fronteras para una interacción productiva

Este artículo presenta un modelo de investigación acción que distingue cuatro contextos en donde este tipo de investigación tiene lugar: aportando valor práctico, mejorando las instituciones, desarrollando profesiones e investigando la teoría. Argumentamos que la investigación acción no es solo una combinación de actividades dentro de alguno de estos contextos, pero más importante es un proceso de manejo de las tensiones generativas en las regiones fronterizas entre contextos. En este artículo, primero discutimos los contextos, identificamos sus contrastes y señalamos las tensiones que éstos pueden crear. Seguidamente, mostramos como el 'tetra-modelo' resultante puede ser usado para guiar elecciones de diseño, ayudando a una investigación acción a medida para situaciones específicas y objetivas. Tanto el modelo como su aplicación han sido perfeccionados durante dos décadas de práctica continua y reflexión de los autores.

Palabras Clave: Investigación acción, perspectiva multi-contexto, contradicción, diseño, cruce de fronteras

Introduction

Action research has grown to take on many different forms that do justice to diverse situations and needs (e.g. Bradbury, 2015; Noffke & Somekh, 2013). However, this diversification of approaches has made it easier to lose sight of common principles, and it has made it harder to select which combinations of action and research are best suited for specific situations. Typologies seek to clarify the many possibilities, such as the '27 flavours' framework of action research (Chandler & Torbert, 2003), which distinguishes types of action research along the dimensions of voice, practice, and time. While such typologies enable the classification of diverse forms of inquiry (e.g. Bradbury, 2016), they do not provide guidance in tailoring an action research project to a specific situation.

We developed our views on action research through our work as scholar-practitioners, having our institutional 'home' first in consultancy and second in education and academia. We have found it useful to emphasise distinctions between the types of situations that practitioners often face. This began 20 years ago, in acknowledging the divergence within action research projects between the needs of various actors (such as managers, workers, educators, researchers) and their institutional settings (such as client organisations, workplaces, schools, academia). Over time our experiences and insights have evolved into a recognition and modelling of four contexts of action research that we present here. This view of action research has proven useful in multiple ways: for collaborators, it has provided a common language and legitimised tensions as meaningful, and for practitioners, it has aided us in thinking through action research designs and encouraged us to pay more attention to boundary work. In this paper we present a meta-perspective of action research as an activity spanning multiple contexts, discuss the tensions in the boundary regions between contexts, and present three ways to apply this approach, each illustrated with a case

The multiple contexts of action research

Action research as a triangle

In his only paper on action research, Lewin (1946) describes a 'change experiment on minority problems' that aimed to train community workers in Connecticut to address race relations, as an example of 'experimental comparative studies of the effectiveness of various techniques of change' (p. 145). Interestingly, he hardly reports on his findings other than a few realisations, including that intergroup relations are a two-way affair, which means that so-called minority problems are in fact majority problems. Instead, Lewin focuses on 'the tremendous pedagogical effect' that the research activity had on the training process. The research activity in question involved recording: observers, group leaders, and trainees gave daily reports on leadership and group development in the training groups by speaking into a recording machine, apparently while in each other's presence. The result was an 'atmosphere of objectivity' and a 'readiness by the faculty to discuss openly their mistakes' (p. 149). This generated:

Using dialogue arenas to manage boundaries between sectors and disciplines in environmental research projects

Joacim Rosenlund, Erik Rosell

Abstract

An interactive research strategy, a form of action research, was used in two environmental research projects. This strategy emphasises a balance between research and practice. Further, the method of dialogue arenas was used, meaning the creation of different types of meeting places where research and practice interact with each other. This paper shows the strength of these dialogue arenas to identify and cross boundaries. During these dialogue arenas the interactive researcher encountered two such boundaries. The first boundary was found in the research system between social science and natural science. The second boundary was found in the practice system between the collaborating sectors. Dialogue arenas helped in managing these boundaries by clarifying the role of the social scientist, facilitating collaboration, and democratising the research process.

Keywords: Interactive research, boundaries, cross-sector collaboration, transdisciplinary science, environmental science

Utilizando espacios de dialogo para gestionar los límites entre sectores y disciplinas en proyectos de investigación ambiental

En dos proyectos de investigación ambiental fue utilizada una estrategia de investigación interactiva, una forma de investigación acción. Esta estrategia hace hincapié en el balance entre la investigación y la práctica. Además, se utilizó el método de los espacios de dialogo, lo que significa la creación de diferentes tipos de lugares de encuentro donde la investigación y la práctica interactúan entre sí. Este artículo muestra la fuerza de estos espacios de diálogo para identificar y cruzar límites. Durante estos espacios de dialogo, el investigador interactivo encontró dos de estos límites. El primer límite fue encontrado en el sistema de investigación entre las ciencias sociales y las ciencias naturales. El segundo límite fue encontrado en el sistema de práctica entre los sectores colaboradores. Los espacios de diálogo ayudaron a manejar estos límites, aclarando el papel del científico social, facilitando la colaboración y democratizando el proceso de investigación.

Palabras Clave: Investigación interactiva, límites, colaboración intersectorial, ciencia transdisciplinar, ciencia medioambiental

1   Introduction

Environmental problems need to be addressed by both natural and social sciences in order to include both technical and social processes. As stated by Hilary Bradbury (Bradbury 2001) action research can provide "a common language to many of the cross-sector initiatives that include people from the cultural and economic realms". Even large scale problems like climate change can benefit from an action research approach, as it empowers people to influence policy from a grassroots level (Hall, Taplin, & Goldstein 2010). It has also been noted that action research can aid in sustainability transitions by creating an interactive space between academics and the community (Wittmayer, Schäpke, van Steenbergen, & Omann 2014). In this paper, we define and present dialogue arenas as examples of such interactive spaces. Dialogue arenas can be seminars, workshops, search conferences and other common meeting forums where researchers and participants interact with each other.

Previously search- and dialogue conferences have used this same principle. These use a longer timespan which is more demanding for the researcher and the participants (Ahmad, Gjøtterud, & Krogh 2016; Ekman Philips & Huzzard 2007; Shotter & Gustavsen 1999). Other terms that have been used are study circles, peer-group mentoring and research conferences (Rönnerman et al. 2015). During such dialogue arenas communicative spaces are created (Wicks & Reason,2009). The goal is to create informal situations based on a specific topic of interest both to researchers and practitioners. Well-functioning communicative spaces are inclusive by design (Forester 1999). While the organisers present the topic, the discussion part is important and here the participants should mix with each other to get new input. Dialogue has been an integral part of action research and its importance for the research process has been emphasised in dialogic action research (Maurer & Githens 2010). Such spaces are open to the expression of needs, frustrations, and visions from individual participants.

The empirical context is based on previous research conducted by the main author who has been a member of an environmental science research group for more than five years. While members of the group had their background in natural sciences, the main author had a background in social sciences and was recruited to the group to do research on environmental research collaborations. More specifically, triple helix collaborations (Etzkowitz & Leydesdorff 2000) where university, industry and public sector collaborate. Being a social scientist in a natural scientist environment meant taking part of two different ontological and epistemological worlds. Involving participants in cross-sector collaboration added another level of complexity for the action researcher.

Balancing between the research and practice systems is a recognised challenge in action and interactive research (Ellström 2008; Sandberg & Wallo 2013). In this paper an interactive research model, for studying and facilitating cross-sector collaborations, is developed. Dialogue arenas are at the centre of this model. The first aim of this paper is to identify and discuss two boundaries that were encountered by the interactive researcher in two environmental research projects. The second aim is to describe and evaluate the interactive research model that was developed in order to investigate, and at the same time manage, the challenges that arose from the two boundaries within the cross-sector collaborations. The following subsection describes these two boundaries.

Teaching in the History of Education:
a transdisciplinary perspective

Alboni Marisa Dudeque Pianovski Vieira

Abstract

The study aims to discuss teaching with research in History of Education in a transdisciplinary perspective, using primary sources and new goals. In this way, subjects that were not of interest to traditional history such as educational institutions and the lives of teachers, were studied by the students of a Pedagogy course at a higher education institution. The methodology used was action research, which enabled academics, in addition to the development of skills related to historical research, to analyse data collected from sociological, political, legislative, economic and educational points of view, with links between these different areas. Theoretical support was sought in the work of Nicolescu (1997), Revel (1998), Nóvoa (2002) and Tripp (2005), among others. The results were favorable and showed that differentiated teaching practices enabled the understanding of historical facts in their interrelationships with other sciences.

Key words: History of Education, action research, transdisciplinary.

La enseñanza de la Historia de la Educación: una perspectiva transdisciplinaria

El estudio tiene por objetivo discutir la enseñanza con investigación en Historia de la Educación, en una perspectiva transdisciplinaria, con la utilización de fuentes primarias y nuevos objetos. Así, temas que no interesaban a la historia tradicional, como las instituciones escolares y la vida de profesores, fueron investigados por los alumnos del curso de Pedagogía de una institución de educación superior. La metodología adoptada fue la investigación acción, lo que posibilitó a los académicos, además del desarrollo de cualificaciones relacionadas a la investigación histórica, analizar los datos recolectados bajo el punto de vista sociológico, político, legislativo, económico y educacional, con articulación entre esas diferentes áreas. Se buscó apoyo teórico en los trabajos de Nicolescu (1997), Revel (1998), Nóvoa (2002) y Tripp (2005), entre otros. Los resultados fueron favorables y demostraron que la práctica pedagógica diferenciada posibilitó la comprensión de los hechos históricos em sus interrelaciones con otras ciencias.

Palabras-clave*: práctica pedagógica; transdisciplinaridad; enseñanza con investigación

Purpose

The rethinking of pedagogical practice in the teaching of the History of Education has been a constant concern of the researcher throughout the many years of teaching in the area. To overcome the positivist conception, the methodologies that make uninteresting and less experiential learning, lack of student awareness as subjects of their own history and, as a consequence, not assuming their role in society, it is necessary to constantly seek differentiated, innovative practices that allow a more committed, effective learning that is at the same time challenging and enjoyable. It is necessary to work, also, so that the student knows that the study of laws and educational policies cannot be taken as a reflection of reality: the practice shows that these documents go through processes of appropriation, assimilation and resistance in their execution. The content worked in the discipline cannot remain foreign and distant from the student world: it is necessary to involve it, seduce it, in the tangle of sources in which history unfolds, turning the school into a place of renewal, of the historicisation of conflict, of awareness of the presence of history in their daily lives and the possibility of interfering in the transformation of the reality in which they live

As Nóvoa (1992) states,

The History of Education is not only important because it provides us the 'memory of educational pathways' (in some cases it may take a certain exemplary position), but above all because it allows us to understand that there is no determinism in the evolution of educational systems, pedagogical ideas or school practices: it is the product of a social construction (Nóvoa 1992, p. 211).

In a training course for teachers, what is the History of Education for? What would be the result of using primary sources, involving events, actors and places within the reach of the students, to rebuild the local history and then insert it into the regional and national context of education? Would linking the local to the regional and then to the national give meaning to historical events, making it possible to establish a dialectical relationship between the unknown past and the known present? Would the student go from a naive curiosity to a critical analysis of reality, maturing and consolidating their citizenship? How is it possible to stimulate a new understanding of reality, in this context?

After transforming those questions into proposals, I have submitted the action research, in a transdisciplinary perspective, to my students of the 2nd period Pedagogy course at a large private university, who accepted the challenge, committing themselves to develop it.

It is important to highlight that, when working with the early grades, they should offer children the knowledge of their history, their family, their neighbourhood and their city, motivated scholars to pursue a practice that also gave them an understanding of their historical identity and their role in society. It is necessary to add also that by working with history in the early grades, the teacher does not always have the studies available that can help them as much as the content, which very focused on the reality of the student, but, nevertheless, can be unveiled with the help of different sources.

This need for the teacher to know the history of local education, which will be worked in elementary school, raises the reflection on the antagonisms and/or interdependencies between local history and national history. The perspective of micro-history, contextualised through an observation scale (Lepetit 1998), enabled the understanding of adjectives such as national, regional and local, defining social spaces in which historical subjects act. This

The Action Research story of a student–teacher: Change is not easy and it takes time, effort, and critical reflection

Nicolina Eriksson, Jan-Erik Romar, Ben Dyson

Abstract

The purpose of this paper is to report on the pedagogical and research learning I experienced as a physical education student–teacher engaged in an action research project, for which I designed and implemented an innovative teaching model. In my roles as student–teacher and researcher, I wanted to examine the impact of using Sport Education in a Finnish school context by analysing and understanding my teaching as well as my students' experiences. Data collection included my personal reflective journal, video observations, student group interviews, and student diaries. The results of this study reinforced previously reported benefits of Sport Education, although there are contextual and pragmatic issues that need to be acknowledged. Even though implementing a new pedagogical approach was time-consuming, stressful, and full of real-world challenges as well as the additional demands of the action research project, I still learned a great deal about teaching and research.

Key Words: action research, physical education, student–teacher, curricular change, teacher education

La historia de la Investigación Acción de un estudiante-profesor:
El cambio no es fácil y lleva tiempo, esfuerzo, y reflexión crítica.

El propósito de este trabajo es informar sobre el aprendizaje pedagógico y de investigación que he experimentado como estudiante-profesor de educación física involucrado en un proyecto de investigación acción para el que diseñé e implementé un modelo de enseñanza innovador. En mis roles como estudiante-profesor e investigador, quise examinar el impacto del uso de la Educación Deportiva en un contexto escolar Finlandés, analizando y comprendiendo mi enseñanza así como las experiencias de mis estudiantes. La recopilación de datos incluyó mi diario de reflexiones personales, observaciones en video, entrevistas a grupos de estudiantes y diarios de estudiantes. Los resultados de este estudio reforzaron los beneficios previamente reportados de la Educación Deportiva, aunque hay cuestiones contextuales y pragmáticas que deben ser reconocidas. A pesar de que la implementación de un nuevo enfoque pedagógico consumía mucho tiempo, fue estresante y lleno de retos del mundo real, así como las demandas adicionales del proyecto de investigación acción, aprendí mucho acerca de la enseñanza y la investigación.

Palabras Clave: investigación acción, educación física, estudiante-profesor, cambio curricular, formación de profesores

Introduction

A new national curriculum will be implemented in Finland at the beginning of the 2016-2017 school year. Although the Finnish education system is already child-centered and liberal (Sahlberg 2011), the overall goal of the new curriculum is to give students more independence by giving them responsibility for their own learning through an emphasis on the joy of learning and students' active role (Finnish National Board of Education 2015). More specifically, in physical education (PE), students should become active participants who are able to cooperate and help each other (Finnish National Core Curriculum for Basic Education 2014). This significant change is one reason teachers should find new methods of teaching physical education. For the first time ever, model-based practice and Sport Education (SE) in particular have been included in the teacher guidelines of the Finnish National Core Curriculum for Basic Education (Utbildningsstyrelsen 2014) as a method of enriching PE.

The SE model is an internationally used and researched model that has had several positive outcomes (Layne & Hastie 2015), and it will be further developed in later sections. It is also gaining more traction in countries that do not primarily speak English, though studies in these countries are still limited, as well as textbooks in languages other than English (Glotova 2011). There is a gap in the literature base about model-based practice in Scandinavia (Romar 2013; Romar, Ahlroos, Flykt, & Penttinen 2015). Although there has been an initial effort in Finland (Romar, Henriksson, Ketomäki, & Hastie 2016), there is still a need for more research on the implementation of SE in Finnish schools.

In addition, Araújo, Mesquita, and Hastie (2014) pointed out that there are still several gaps in international SE research, which they suggested could be filled through action research in SE. This was one of the main reasons I wanted to study SE through action research. I chose to do so during my final student–teacher experience as a way of increasing my knowledge of innovative model-based practices, which are also expected in research-based teacher education programmes in Finland (Niemi & Nevgi 2014). Research-oriented teacher education has received credit as well as criticism due to the relation between research and practice. By situating action research in teacher education, educators assume that authentic researcher experiences will help preservice teachers translate theory into practice, particularly when dealing with innovative instructional strategies (Kemmis 2010). Furthermore, Eklund (2014) proposed that action research could be a solution to preservice teachers' dilemma. Though teachers understand and see the logic of the research orientation, they feel that research-based teacher education does not give them enough practical tools.

All first-person references in this article refer to Nicolina, as I was the practitioner in this study. When drawing conclusions and implications, all three authors' voices will be heard. Jan-Erik and Ben, the silent coauthors in this paper, were experienced university faculty members who have expertise in the use of SE and action research, respectively. Jan-Erik was the master's thesis supervisor, and we constructed the SE unit, discussed data collection, analysed the data, and discussed the findings together. He also challenged my understanding of the whole process. Ben provided an outside audit, giving peer debriefings and acting as a critical friend in order to challenge my interpretations of the student–teacher experience.

A Mixed Methods Research on Teachers' Beliefs about Action Research in Second Language Education

Vahid Rahmani Doqaruni, Behzad Ghonsooly, Reza Pishghadam

Abstract

Despite the fact that the beliefs about action research (AR) are considered essential for teachers' professional development, teachers' beliefs about AR have not been studied in any systematic way in second language education. This study is thus an attempt to fill the gap through examining Iranian teachers' beliefs about AR. The present study used a mixed methods design, i.e. questionnaire and interview, to gain a richer understanding of the participants' beliefs about AR. The participants were 65 English teachers from 5 private English language teaching institutions. The findings revealed that most of the teachers equated AR with observation, had the ability to distinguish between AR and standard research, preferred collaborative AR, and, in contrast to the mainstream research, did not believe AR to be a way to professional development. The results also showed that while AR is not unknown among these teachers, its use is not widespread, which highlights the need for organizational, practical and intellectual support from responsible agencies.

Key Words: teachers' beliefs, action research, mixed methods design, questionnaire, interview

Una Investigación de Métodos Mixtos sobre las Creencias de los Profesores sobre la Investigación Acción en la Educación de una Segunda Lengua

A pesar del hecho de que las creencias sobre la investigación acción (IA) son consideradas esenciales para el desarrollo profesional de los profesores, las creencias de los profesores sobre la IA no han sido estudiadas de manera sistemática en la educación de una segunda lengua. Así, este estudio es un intento de llenar ese vacío, examinando las creencias de los profesores iraníes acerca de la IA. El presente estudio utilizó un diseño de métodos mixtos, es decir, cuestionario y entrevista, para obtener una comprensión más rica de las creencias de los participantes acerca de la IA. Los participantes fueron 65 profesores de Inglés de 5 instituciones privadas de enseñanza del idioma Inglés. Los hallazgos revelaron que la mayoría de los profesores equipararon la IA con la observación, tuvieron la habilidad de distinguir entre la IA y la investigación estándar, IA colaborativa preferida, y, en contraste con la corriente principal de investigación, no creyeron en la IA como una forma de desarrollo profesional. Los resultados también mostraron que, si bien la IA no es desconocida entre estos profesores, su uso no está muy extendido, lo que pone de relieve la necesidad de apoyo organizativo, práctico e intelectual de las agencias responsables.

Palabras Clave: creencias de profesores, investigación acción, diseño de métodos mixtos, cuestionario, entrevista

Introduction

In the field of second/foreign language (L2) teacher education, beliefs are viewed as an essential ingredient in teacher development, and have attracted the attention of many researchers. This is due to the fact that beliefs "are involved in helping individuals make sense of the world, influencing how new information is perceived, and whether it is accepted or rejected… [beliefs] serve to frame our understanding of events" (Borg 2001, pp. 186-187). Numerous past studies on L2 teachers' beliefs have provided us with invaluable insights on comprehending plans teachers use when implement their teaching, and the important role beliefs play in teachers' classroom practices in the last two decades. This strand of research in the fields of applied linguistics and second language acquisition has looked into teacher beliefs in diverse L2 teaching contexts and from different perspectives (e.g., Basturkmen et al. 2004; Borg 2011; Farrell & Lim 2005; Kern 2008; Levine 2003; Phipps & Borg 2009; Underwood 2012; Zheng & Borg 2014). In line with this general disposition toward exploring teachers' beliefs in L2 education, researchers have recently paid a special attention to teachers' beliefs about research generally (e.g., Allison & Carey 2007; Barkhuizen 2009; Borg 2007, 2008, 2009; Gao et al. 2011; and Hiep 2006), and action research (AR) specifically (e.g., Atay 2006, 2008; Bashir 2011; and Rainey 2000).

The primary reason underlying this drive has been that such beliefs are considered essential for teachers' professional development (Borg 2010; McDonough 2006). In other words, reading and doing research can empower teachers to better comprehend their work, encourage them to reflect on what they do, lead them to explore different avenues regarding new thoughts, and become more autonomous (e.g., Kirkwood & Christie 2006; Tinker Sachs 2000). AR is specifically noteworthy, as teachers are increasingly being encouraged to carry out small-scale research studies in their own classrooms, and to assume the role of a teacher-researcher (Atay 2006, 2008; Burns 2010; Edwards & Burns 2016; Wyatt 2011). It is now an established belief in the field of L2 education that the process of AR, if conducted systematically and extensively, enables the construction of teacher-generated knowledge, thus empowering teachers as the creators and not just the holders of such knowledge (Avgitidou 2010). Moreover, AR has been regarded favorably because it can help teachers develop in-depth perspectives about the process of teaching and learning (Lacorte & Krastel, 2002). In addition, AR can help L2 teachers recognise the importance of learning how to seek answers to their questions (Tedick & Walker 1995), address and find solutions to particular problems in a specific teaching or learning situation (Hadley 2003), develop personal theories about L2 learning (Crooke, 1997), reduce gaps between academic research findings and practical classroom applications (Sayer, 2005), and become familiar with research skills and enhance their knowledge of conducting research (Crookes & Chandler 2001).

Despite such benefits, however, it seems that teachers beliefs about research and AR have not been studied in any systematic way in English Language Teaching (ELT) and while there is a large amount of research about the benefits of teacher research engagement, we do not have as much knowledge about teachers' beliefs about research (Borg 2008). As Borg (2007, p. 733) emphasises, "this gap in our understanding means we are unable to