

Reflective innovations to overcome challenges in a Chilean action research project: my personal reflections

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The rise of innovations

I remember my struggle in high school when my teachers mentioned: "This work needs to be *innovative* if you want to succeed in your assignment". All the time students were encouraged to include different, original and inventive aspects into their assignments and daily tasks. However, back in my school days my understanding of innovation was unclear as it mostly involved colouring as much as I could or adding some drawings in my works. Innovation, at that time, was exemplified and highlighted by teachers as a recipe for success and students were meant to follow descriptive patterns to make the most innovative work. At university innovation took on a new perspective focused on reflecting, understanding and changing what we were learning to improve traditional teaching practices by including technology, authentic materials, contextual learning or new methodological approaches to teach.

After my university years I became a professional teacher, i.e. a person in constant training of acquiring the knowledge, skills and abilities to improve my classroom practices by reflecting on the processes behind my teaching (Moon, 2000). Thus, I actively engaged in different professional development courses that provided a comprehensive understanding of the meaning of innovative teaching and learning for me.

I have seen as a teacher that innovations in education are mainly addressed in two aspects. Firstly, regarding the design of courses and educational plans, with reference to curriculum implementation and policy making (Darling-Hammond, 2010; Dumont et al., 2010; Hayes, 2008); and secondly by addressing the way teachers deliver their classes with the support of technological tools or new methodologies (Babiloni, Guijarro, & Cardós, 2016; Motteram, 2013; Whyte, 2015). In both realms innovation involves an attempt to try different pedagogical approaches and make changes to improve someone's practice. I believe that innovative practice also involves a collaborative and problem-solving process where you work together with colleagues or partners to make learning real, contextualized, relevant and engaging for students. That is why, when I faced complications in my PhD research, I concluded that innovative strategies were a critical aspect to overcome the mountain of challenges emerging in this action research project. These challenges emerged unexpectedly, bringing a need to improve the design of my research, the participants' roles and methods involved. The following account briefly describes this action research project and traces the first lines of the emergence of two reflective innovations in my study.

A brief description of the action research project in Chile

The project started when eleven school teachers from private and subsidized schools in different regions in Chile identified their classroom problems in an individual face-to-face interview. In these interviews the teachers discussed a contextual problem affecting

their practices, explored its possible causes and assessed their roles in the problematic situation. Finding a solution to their problems was not an easy task for us. In fact, it required an intensive, thoughtful and timely planning because the teachers needed to collaborate, exchange their points of view, plan and reflect to design strategies to solve their problems. These collaborations were possible through the use of Wikis¹ in Google Docs. Then, the teachers started to share ideas, videos, articles and teaching material regarding the nature of their problems in a shared document. I have to recognize that these collaborative instances were highly productive teaching encounters as teachers were interacting together and learning with and from one another to solve their complex situations and take a purposeful action to improve them (McNiff & Whitehead, 2013).

After a month of online discussions the teachers were ready to apply the action strategies collated from the Wikis. For some teachers the implementation brought immediate positive effects, while others faced negative sides as resistance to change and unforeseen problems. For instance, some of their colleagues complained that the new strategies applied were interfering with the classroom dynamic, study plans and students' learning attitudes. These unexpected problems triggered new questions and concerns about the effectiveness of their decisions.

After two weeks of discussions on the new problematic situations, some decisions emerged. This critical evaluation "enabled a reflective cyclic process on the understanding of the problem at hand" (Opie & Sikes, 2004, p. 79) and enabled teachers to take new actions and start a new cyclical process which involved a new *exploration, planning, action and reflection...*

The above account emphasized one of the many problems emerging in this action research implementation, regarding resistance to change in schools. It is my intention to describe some further collaborative, technological, attitudinal and time-management challenges in this study. These challenges have been collated from the reflective log I kept during the implementation of the study.

My reflective log: the main challenges in an action research implementation

Action research is essentially a collaborative endeavour where you depend on your participants and your research cannot happen without them... (McNiff & Whitehead, 2013).

This sense of dependence mentioned in this quotation is linked to the first challenge I faced which relates to time constraints, participation and commitment in a long-term process. Chilean teachers have heavy working loads and therefore little time to actively engage in professional development programmes. In fact, the demands of school teachers seem to evolve as the first term finishes. For example, the national parties'

¹ A collaborative document that allows different people to add, delete, or revise content.

celebration, the AEP² teacher evaluation, the SIMCE³ test and PSU⁴ for secondary students are important aspects to consider as these events create invisible barriers to collaboration, interaction, or application of changes in teachers' practices. During the research implementation, two teachers dropped out of the study as they were not able to contribute actively in the Wiki discussion. These teachers argued that action research was an enriching approach for their professional development, but the planning and action process demanded a huge amount of time that was incompatible with their professional duties... (Log entry June, 2015)

Change is a complex process which tends to be underestimated by those responsible for introducing it... (Craft, 2000) .

I experienced this issue in two senses: (a) resistance to the unknown and (b) teachers' resistance to change in their practices. Köksal (1995) addresses these issues by emphasizing that sometimes innovation is not accepted because it suggests something not used in the past or because teachers are confident of the success of their own methods, making innovation unnecessary. In the first stage of the action research project, I devoted extra time to explain and clarify the meaning of action research when one participant mentioned that he did not know anything about it, and he wanted to be convinced to participate in the study. I also struggled to shape one teacher's view regarding the positive impact his participation would have on his practices. This teacher had concerns regarding how technology could be used to enhance students' concentration and attention in the class. He finally decided to participate in the study after I mentioned that a possible solution to the problem may arise in group interactions with other teachers... (Log entry June, 2015)

Collaboration involves the collision of our thought with the thought of others that engenders doubt and calls for verification... (Vygotsky, 1986).

I experienced both the negative and positive sides of collaboration in this study. The positive side is related to the notion of learning from each other's experiences in the collaborative Wiki activity. Teachers mentioned that they felt empowered and motivated to read the advice of more experienced colleagues. In this regard, one participant mentioned "*The collaborative experience and the learning gained from this collaboration has been better than reading any book*" when asked about the perceptions of the Wiki. However, I also perceived that this feeling was not extended to the other teachers who described the experience as something anecdotal without a deep impact in their development. Thus, another participant pointed out "*it was a good activity, but I couldn't apply any of the strategies because they were not relevant for my context...but I enjoyed the activity, I mean it was fun!*"... (Log entry August, 2015)

² Programme for the Accreditation of Pedagogical Excellence that covers public and subsidized schools.

³ The Chilean evaluation system to evaluate all students in fourth, sixth, and tenth grades in literacy, numeracy, English, history and sciences.

⁴ University admission test for all students in Chile

To create an online learning community the purpose of a shared interest or need is essential... (Palloff & Pratt, 2003)

After reading the interactions and comments of the teachers in the Wiki, I realized that the notions of interest and need were critical for the development of my study. I see that the most enthusiastic teachers had a real need, purpose and interest toward the uses of technology and they were in a way willing to participate and interact. I shared Palloff and Pratt's ideas (2003, p. 16) that course participants must "have a need to be open to share personal experiences, be ready to encounter technical difficulties, be willing to take responsibility for community formation and to work collaboratively". Some of the participants had difficulties in understanding the importance of entering into a learning community. For example, one participant expressed his concerns regarding sharing a photo in the social wiki, while another expressed that her lack of technical skills might affect her performance in the forums... (Log entry September, 2015)

The main features of the reflective innovations

The above challenges gave me the chance to evaluate some strategies and actions in the development of the research. Thus, I planned two innovative reflective strategies to maximize the reflective process of the participants, inspire them to contribute with others and promote changes in their practices. These strategies mainly involved (a) a critical evaluation of the action research stages by following Gibbs' reflective cycle (1988), and (b) understanding of the ethical issues emerging in the research by considering Brydon-Miller et al.'s (2010) structured ethical reflection.

The first innovative strategy involved my "capacity to acknowledge how my own experience and context inform the process of and outcomes of the study" (Etherington, 2006, p. 81). For this, I decided to adopt Gibbs' reflective cycle (1988) (see Appendix), mainly because (a) it provides a basis from which to make pertinent decisions with adequate reflection in the action research process, (b) helps to make a self-assessment leading to a significant style of planning, and (c) gives a better understanding of my researcher positionality to clarify my researcher's bias (Creswell, 2009). To organize reflexivity I proposed to follow Gibbs' six stages model, which involves a description of a problem, complemented with my positive/negative feelings that lead to a critical analysis which collates in conclusions and actions. This cycle helped to solve some problematic issues in the study and developed my reflexivity in the writing up process of my dissertation. A reflective log that exemplified this process was critical (see Appendix), as it helped me to evaluate what I was doing and gave me further insights into the problematic issues.

Brydon-Miller et al. (2010, p. 2) present a model to develop a systematic framework for ethical reflection in an action research process termed "structured ethical reflection". This model merges the reflective characteristics of the study and adds two extra ingredients to the ethical process by integrating "ethical procedures into each stage of the action research cycle" (Boser, 2006, p. 15), and "an ethical mindfulness" approach - a term harnessed by Etherington (2006) to understand how a researcher influences "the research participants' perceptions and a simultaneous and

interdependent awareness of how they are influencing me” (Warin, 2011, p. 809). To achieve this approach the four stages of the action research process were split into seven headings. The idea is to add the values that guide your practice, and then consider how these values are reflected at each stage of the action research process by questioning how the values articulate the decisions taken. Table 1 shows the seven action research stages and the basic principle I achieved.

TABLE 1. STRUCTURED ETHICAL REFLECTION (TAKEN FROM BRYDON-MILLER ET AL. 2010, P. 3)

Basic principle	Respect
Developing Partnerships	By respecting the teachers or research partners personal time. E.g. by being punctual in (on-line) interviews/meetings or by addressing them in respectful terms as Sir, Miss or Madam. This is important in a Chilean context.
Constructing research Questions	By carefully evaluating the impact of the research inquiry into the teachers’ lives. E.g. Would my research questions demand that the teachers reveal personal information that may cause future complications?
Seeking funding	By respecting the sponsors’ decisions about assigning money for the project or not. This also implies a self-analysis of the weakness and strengths of my proposal.
Planning Action	By respecting teachers’ attitudes toward planning. E.g. some teachers can plan in a detail way while some other may only sketch some ideas in their mind. It is also important to consider the teachers’ ideas, concerns, limitations and interest in the planning for action.
Taking Action	By respecting their personal times in the implementation of the actions as not all the teachers will follow the same path of implementation, some may take longer than others.
Evaluating Action	By defining the aspects of evaluation with the teachers. So, they do not feel threatened or assessed during the evaluation stage.
Disseminating Results	By asking teachers for their consent before disseminating the result, and by respecting their personal reasons if they do not want their comments to be published

Conclusion

Working in an online action research project with eleven primary and secondary high school teachers clarified my visions regarding the socio-cultural, practical and motivational challenges we face when implementing changes in our practices. I have the belief that after applying Gibbs’ reflective cycle (1988) and Brydon-Miller’s et al. (2010) ethical approach, I developed my researcher’s reflexivity and maximized the research impact of my study by including a holistic reflexive approach that impacted the participants’ well-being and actions, and led them to a better ground for reflection. I argue that researcher reflexivity in an action research process plays a critical role in shaping the attitudes and motivation of the participants. It is also a good starting point to make a critical analysis and be prepared for the unforeseen challenges every research project encompasses. The two strategies mentioned also stimulated participants’ understanding of professional development as a process of collaboration, reflection and social interaction where challenges were part of their own development. These strategies provided the basis for teachers to address their immediate contexts, and to work on a problem that was at hand and not imposed by others.

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Appendix

REFLECTIVE CYCLE STAGES ADAPTED FROM GIBBS (1988)

Stages	What is included in this stage?	Questions to organize the cycle
Description	You need to explain what you are reflecting on by providing background information. Avoid details that are not relevant	What happened in this phase of the action research cycle?
Feelings	You need to include your feeling and emotions regarding the experience in an honest way. Avoid chatty texts.	What were my reactions and feelings?
Evaluation	You need to discuss how well you think things went. You can include references of other authors.	What was good or bad about the action research experience?
Analysis	You need to analyse what might have helped or hindered the event. You can also compare your experience with relevant literature.	What sense can you make of the situation? What was really going on? Are there patterns or themes emerging? Etc.
Conclusions	You need to mention what you have learnt from the experience and consider whether you could have responded in a different way.	What can be concluded, in a general sense from these experiences and analyses I have undertaken? What can be concluded about

		my own specific, unique, personal situation or ways of working?
Action plans	You need to take actions to solve the problem. For example, do more reading, talk to the participants, talk to your supervisor, etc...	What am I going to do differently in the next stage? What steps am I going to take on the basis of what I have learnt?

Sample: Getting access (adapted from the pilot study)

What happened in this phase of the action research cycle? (Description)

I drafted the invitation to the study by emphasizing the innovative technological, collaborative and reflective aspects this project could trigger in the teachers’ performance and attitude toward the uses of technology. Thus, I wrote a simple and engaging invitation, which included the main objectives of the study, the participants’ duties and my duties as a researcher. Clear dates, contact email, the right to withdraw and the possibility to clarify doubts were included as well. Then, I contacted fifteen teachers through email and Facebook by following a snowball procedure, I also asked them to share the invitation with their colleagues in their schools. I was hopeful this was going to be the easiest part of the study. However, only six of my contacts answered within the next three days by replying “OK” or “I will try to do it”, and after one week none of them replied to my invitation.

What were my reactions and feelings? (Feelings)

I felt extremely discouraged and disappointed at that time. In fact, I panicked and I was upset with my future research participants for their lack of support toward me. I thought about changing the focus of my study, but then I realized it was only the beginning of a long journey and I remembered Claxton's (1999) advice on the resilient learner. Then, I decided to ask for support from fellow researchers and they advised me to contact the teacher directly and not rely upon the snowball process.

What was good or bad about the action research experience? (Evaluation)

At that time, I did not feel the situation had been resolved as I realized that Chilean teachers had two main problems. Firstly, they work long hours and most of them are exhausted and will not have the time or the willingness to participate in the study. Secondly, some people do not check Facebook or emails regularly. I also realized that Facebook was not proving to be a reliable tool to contact participants, as it was too informal for the purposes of my study. I also questioned the structure of the invitation.

Was it too formal? or informal? Mertens (1998) mentions that the researcher should consider the best means of getting access to a population. Thus, aspects of distance need to be considered as a potential barrier, and my aims must be focused on the prevention of these invisible walls.

What sense can you make of the situation? What was really going on? (Analysis)

After an analysis of the situation, I realized that the teachers were really busy with the end of term duties. This lack of time was complemented with some technological aspects that prevented the delivery of the letter. As I realized later some teachers read the letter but they took some time to think about it, and maybe adjusted their response according to their own priorities.

What can be concluded, in a general sense from these experiences and analyses I have undertaken? (Conclusions)

In retrospect, I would do lots of things in a different way. I shouldn't have taken for granted distance and teachers' busy schedules. I should have been more assertive in the design of the invitation letter, as I still believe it was too formal and unattractive for some teachers. Regarding my attitudes and feeling toward the teachers who did not reply to my emails. I should have been more respectful of the participants' decisions to participate or not. I am an English teacher as well as a researcher and at the time of the interviews I was selfish as I only thought about my interests as researcher. I should have *really listened* to my supervisors' comments regarding the complication of getting access. I remember saying "Oh, no worries. Everything is under control" when in fact it was just my enthusiastic and optimistic voice.

What am I going to do differently in the next stage? What steps am I going to take on the basis of what I have learnt? (Action Plans)

In the future, I will ensure that I contact the teachers with at least one month in advance to give them time to think about the project and professional development. I will also take a more personal approach to get access, for example, I will invite them to a conversation about an opportunity for their professional development. Regarding the format of the letter, I will include some aspect regarding "anonymity, confidentiality issues and avoidance of harm" (Somekh, 2006, p. 158) which can promote a sense of engagement in the participants.