

English language teachers' experience of engagement in educational research

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Abstract

The aim of the study was to examine English language teachers' experiences of engagement in their own classroom research and their perceptions of the changes, if any, in teaching practices and student learning as a result of their classroom research. This is a qualitative study situated within an interpretivist paradigm. Twelve English Language teachers from Singapore primary and secondary schools, who had been awarded research funding, were interviewed. The findings revealed that the teachers believed that, having participated in a research project, their research experience had had an impact on their teaching practices, learning and motivation, and on their student learning and engagement as well as on the educational community.

Introduction

In Singapore, the Ministry of Education (MOE) has called on teachers to conduct research into their teaching (Fu, 2008; Iswaran, 2009). Mr Iswaran, the former Senior Minister of State, Ministry of Education, noted that 'MOE supports such efforts to innovate and has given teachers, who are keen in action research, more time and space to undertake studies to improve the teaching-learning process' (Iswaran, 2009, para. 6). He also noted that MOE encouraged teachers to undertake action research to help improve classroom practice and the quality of student learning because teachers brought a practitioner's perspective to educational issues that might lead to new understanding and breakthroughs that would raise the overall quality of education in Singapore schools. Ms Grace Fu, the former Senior Minister of State, Ministry of Education, has also commented on the need for teachers to be reflective practitioners and noted that a group of teachers had undergone an intensive year-long programme to be trained in research methodology so that they could evaluate curriculum innovations in their schools.

There have been claims of benefits of classroom research to teachers (e.g., Borg, 2010; Queenan, 1988). Queenan (1988) cited benefits such as teachers learning how and what their students needed to learn, modelling how to learn, questioning their own and others' educational assumptions, and developing theories. Borg (2010) listed potential benefits of classroom research found in the literature. For example, it was claimed that classroom research developed teachers' capacity for making professional judgments independently, and allowed teachers to become more reflective and analytical about their classroom instruction. Indeed, Blakemore (2012) found it rewarding to make practical changes in her own educational setting as a result of her own

classroom research. Queenan (1988) also pointed to the benefits of classroom research to students as teacher researchers stopped focusing on themselves and focused more on students and their learning.

However, scholars in the education field have commented that teachers in countries such as Canada, the United Kingdom, Turkey, and Greece did not engage much with research, i.e., read and use it for instructional decisions (e.g., Borg, 2010; Dagenais et al., 2012; Nassaji, 2012; Pappasotiriou & Hannan, 2006; Williams & Coles, 2007). For example, Pappasotiriou and Hannan (2006) found that few teachers read educational research and that those who did engage with research hardly applied what they had read to their classroom practices. Anwaruddin and Pervin (2015) also noted that, in Bangladesh, English language primary and secondary school teachers lacked institutional support to engage with research. Even fewer teachers engaged in classroom research (i.e., conducted classroom research) or teacher research as defined by Borg (2010).

Borg (2010) defined teacher research as 'systematic inquiry, qualitative and/or quantitative, conducted by teachers in their own professional contexts, individually or collaboratively (with other teachers and/ or external collaborators), which aims to enhance teachers' understandings of some aspect of their work, is made public, has the potential to contribute to better quality teaching and learning in individual classrooms, and which may also inform institutional improvement and educational policy more broadly' (p. 395). Borg (2010) did not see formal research reports as the only way of making teacher research public. He proposed a broad view of dissemination of teacher research, which included oral and written formats, formal and less formal contexts, as well as formative and summative forms.

Borg (2010) also pointed out that classroom or teacher research in English language teaching was often conducted by university language teachers rather than school teachers, and that many examples of classroom or teacher research were dissertations produced to fulfil requirements for undergraduate or master's degree programmes. Therefore, very few primary and secondary school teachers engaged in classroom research. The barriers to teacher engagement in classroom research in schools listed by Borg (2010) included a non-collaborative school culture, limitations in teachers' awareness, beliefs, skills and knowledge, limited resources in terms of time and support given to would-be teacher researchers, demotivators, economic matters or financial concerns, lack of leadership attributes, and political issues where there was a desire to maintain the status quo.

Leat, Reid, and Lofthouse (2015), in their study of teachers' views on their experiences with and in educational research, postulated that a supportive context, comprising three levels of support, was critical to teachers engaging in research and learning from the research. The first level of support related to school leaders giving permission to teachers to engage in research and thus ensuring a collaborative learning and working culture and environment for their teachers. The second level was the presence of researchers and academic staff from higher educational institutions who could mentor, guide and nurture teachers who engage in research. The third level referred to policy makers creating 'a context that values an independent and creative professionalism rather than mere subordination' (p. 281). This supportive context for encouraging teachers to engage in and with research, as a policy, is espoused by the Ministry of Education in Singapore. School leaders, however, have the leeway to interpret and implement the policy to suit the school climate in their respective schools.

Theoretical framework

Mezirow's (1997, 2003) theory of transformative learning in adults underpins the current research project. Transformative learning was the process that adults used to construct a change in their frames of reference, the structures of assumptions with which they understood their experiences. These structures developed from adults' expectations that whatever had happened within their experiences was likely to take place again. Thus, if something different or new were to occur, adults would go through a process of questioning or self-reflection. This process also included discussion with other adults. If this process were to lead to a change in the frame of reference where the adults adopted new or different habits of mind (or habitual ways of thinking) thereby acting differently from before, transformative learning would have taken place (Cranton & King, 2003). This theory builds on Dewey's (1916) theory, that one can gain understanding only through one's own experiences.

This study hypothesised that teachers who had engaged in their own classroom research would be more likely to have experienced changes to their habits of mind regarding their pedagogical practices. They would have, thus, reflected on their classroom teaching and their students' learning, discussed these experiences with other teachers, noted the differences and/or changes, and, through transformative learning, made new sense of their pedagogical beliefs and practices.

Research Questions

The study asked the following research questions:

- 1) What are English language teachers' experiences of engagement in their own classroom research?
- 2) What are the perceptions of English language teachers of the changes, if any, in their teaching practices and student learning as a result of their classroom research?

Methodology

Participants

The participants of the present study were 12 teachers who had received funding and support from the English Language Institute of Singapore for classroom-based research projects.

Materials

A set of interview questions was developed to address the following areas of study:

1. The teacher
 - a. The teacher's understanding of the meaning of classroom research
 - b. The teacher's beliefs in conducting classroom research
 - c. The teacher's reasons for engaging in classroom research
 - d. The teacher's perception of the research experience
 - e. The impact of the classroom research experience on the teacher's pedagogy
 - f. The impact of the classroom research experience on the teacher's professional development
2. The students
 - a. The impact on the students' learning experience
 - b. The impact on the students' learning effectiveness

The interview questions comprised 12 main questions addressing the areas listed, with sub-questions where necessary to encourage the interviewees to elaborate on their answers.

Procedure

Face-to-face, semi-structured interviews were conducted with 12 teachers from August 2016 to September 2016. Each teacher was interviewed individually by two researchers. The objectives of the interview were to investigate how (a) these English language teacher researchers described the changes, if any, in their teaching practices as a result of their classroom research, and (b) how they described the changes, if any, in the way their students learned as a result of the change in their teaching practices.

Before each interview, consent was sought from the participant. Each participant understood that he or she could decide not to continue with the interview or withdraw from the research study. Each interview lasted about an hour and was digitally recorded. Field notes were taken during the interview and were used during the coding of the interviews. The interviews were transcribed verbatim by one of the researchers and all of them were checked for accuracy against the recordings by the principal investigator.

Data analysis

Open coding was used to code the first transcript which was coded separately by two researchers and a research mentor. After discussion, a preliminary set of codes was written down. Then, this set of codes was checked with an independent academic expert, Associate Professor Angela Scarino. Subsequently, a second set of codes was drawn up based on all the input and used to code the same transcript as well as a second transcript. The research team listened to all the interviews, and revised and finalised the codes. Next, examples for these codes were identified and listed under each code.

Findings

Findings were grouped into two broad categories: (a) teachers' perceptions of research experience (How they experienced it) and (b) teachers' evaluations of their research experience (How they felt about it). These broad categories and their subcategories are summarized in the table below:

Table 1

English Language Teachers' Research Experience

Teachers' perceptions of research experience
Purpose of research study
Affective dimensions of learning experience
Research process
Teachers' evaluations of their research experience
Impact on classroom practice
Impact on teacher learning
Impact on student learning
Impact on student engagement
Impact on community
Impact on teacher motivation

Purpose of research study

The findings suggest that the participants found that the purpose of teacher research was to change teaching practices to improve student learning and engagement. This stemmed from their observation of how their students learnt in the classroom or from the analysis of test or examination results. For example, some found that students were struggling with certain tasks and wondered how they could change their teaching practices to help students learn. Others found that some students read a text without understanding it and that the results varied greatly between high and middle ability students.

Affective dimensions of learning experience

The majority of the participants described their research experience to be a positive experience. They used words such as 'enriching', 'fun', 'thrilling', 'discovery' and 'excitement'. They found the experience 'invaluable' and 'worthwhile'. One of them found it 'painful to write again'.

Research process

The findings indicated that the participants found that classroom research was very hard work and that, by its very nature, it required a lot of time. All the teachers described at length their experience of the research process. They also talked about the sharing of their findings at various levels: at level and departmental meetings, within their schools, and at local and international conferences. The teachers received both internal and external support during the research process. The internal support was provided by their team members, school leaders and heads of department as well as their senior colleagues while the external support came from English Language Institute of Singapore (ELIS) Research Team members and ELIS consultants.

Time was a huge issue for all the teachers. It took time to conduct the research as well as to write up the research report. Teachers often had to meet outside school and during school holidays because it was difficult for them to find time to meet during curriculum time within their schools and during term time.

Impact on classroom practices: Focus on student learning and engagement

The teachers cited a number of ways in which their research experience had influenced their classroom practices. They often described themselves as being more aware and reflective of their classroom practices. Their comments suggest that being part of the ELIS research community and conducting their research project was generative to this experience. Here is how one teacher described the impact on their teaching:

So that is something I think most of the time, in our daily teaching we tend to disregard that part. So the pupils' voice to me matters a lot because we really need to find out from what they want to learn, and how do we use that based on our English syllabus and curriculum that we need to complete? How do we actually marry them together and come up with something that will allow us both to have a win-win situation?

Another teacher in another school also expressed a similar sentiment:

When we are so used of doing certain things in a certain way, it takes maybe you know a research like this to make us really open our eyes and see that there are other ways of teaching.

The teachers noted, that in planning their lessons and implementing their teaching strategies, they became more aware of how students respond to their teaching strategies. They explained that, before embarking on the research studies with their students, they tended to make certain assumptions about how students would learn and respond to their lessons. The studies they conducted showed them that this was often not the case. They also began to see their students as individuals rather than as a class.

One teacher noted that she would *'take it for granted that you know we teach it this way and the pupils will say do you understand and unanimously they say oh yes we do. But, however, we realised that there are certain pockets of pupils who really have difficulty in some parts of the writing.'*

Another teacher realised that, for her, it was important that *'kids must always enjoy the lesson. It doesn't matter whether it was a perfect lesson or not, but it does matter if the kids feel that they have had an enjoyable lesson that they've learnt something. That's very, very important, and that's something that has come forth because of my interest in research.'*

This reflective process arose from their engagement in the class research study. All the teachers noted how some changes in their beliefs and assumptions about their teaching strategies, and how their students learn and respond to their learning, as well as how they made changes and/or modifications to their teaching strategies, came about through the reflection that naturally took place as they discussed, analysed and evaluated the results of their classroom research studies. This reflective process validated their research interest and the studies that they had embarked upon.

As one teacher noted, *'in terms of, you know, being more reflective, I think practitioner and looking at certain kinds of assumptions that I had about research, about carrying out action research, and about really what really inspired me by the end of the project was this realisation that you know research is manageable, you know research can be carried out you know alongside you know regular teaching you know cause sometimes you know when you know we know the material you know when we have been teaching the same thing, the same topics you know year after year, year after year, you know there's kind of no really no chance or no much opportunity for teachers to be reflective you know about their pedagogy, about the way in which you know you could look at you know alternative methods of doing this, doing that.'*

This was corroborated by a teacher in another school who commented that *'I think research allows one to be very reflective I think, and to be a bit more intentional in terms of your planning and understanding the outcomes. So it also I think because of that accountability forces you to follow through something right? And I think it places a certain rigour. If you didn't do it, you won't have that, you don't force yourself to do it you see.'*

It is evident that focusing on student learning and engagement in developing teaching strategies needs to be followed up by reflection on the results of implementing such strategies. Conducting these teaching strategies within a research study allows teacher researchers to achieve the focus as well as embark on the reflection that makes teaching meaningful for both teachers and students.

Impact on student learning

All the teachers agreed that their research had had an impact on student learning. For instance, one teacher commented that, after the intervention, one of her students was able to articulate the steps involved in writing a story. Another commented that the writing structure provided a way

for students to 'expand their writing'. Yet another said that the students had a clearer idea of what was expected of them. In terms of reading comprehension, one teacher found that with guided reading questions and teachers' feedback, students could answer questions better.

Impact on student engagement

About half of the teachers reported increased student engagement as a result of their research. For example, one teacher commented:

Now having the ideas, having their voices taken into account, that itself gives them lots of confidence and motivation to really want to do and try their best

This motivation extended to student learning outside school as well.

Pupils are not only motivated and more confident, they begin to ask more questions, more conscious of their mental process, and how they can after they have learnt something, how do they actually you know go home and then look at it again and then you know decipher it in their own ways, and then the next day come back to me and we will discuss you know I find out that this is not working and this is actually working. So I think that the interactive and the discussion becomes more rich in that way.

Another teacher noted that weaker students also became more engaged:

Before the research, the weaker did not have a chance to have a voice. Now, they realise that actually they have a right to make a stand, make a claim, but they need to know how to present it. And sometimes they're just, 'Oh no I don't agree' but then they don't know how they can actually present it you know, so that it is acceptable to the other people who are listening and logical.

Impact on community

The teachers also pointed to the importance of sharing their research findings with the wider teaching community. They saw the importance of sharing, not just with colleagues in the same department, but school-wide, cluster-wide or on a national platform, with the aim to inform and inspire colleagues in the wider community to conduct their own research on new or modified teaching strategies, and to share best practices that had been shown to work in the local school context.

Four teachers from four different schools echoed similar sentiments. One teacher commented that she would 'share with other teachers not involved in the project to relook at their assumptions that kids know everything; because they need to be provided with the knowledge, experience, to actually handle the reading piece or even the comprehension piece and for you expect them to understand at that set amount of time without any, you know, discussion or whatsoever'. Another teacher noted that she and her colleagues embarked on their research study as they were 'trying it and we are hoping that it will be translated back to the other departments also. So it's not just us so ours is just like a stepping stone, we'll see how the ripples go later, whether it will be better, maybe others will pick it up too'. The third teacher enthused about 'other teachers who approached me and asked me, 'Can I also do that thing that you and that colleague is doing. Can I join? This year I actually had another new colleague, we are doing something different, I mean along the same research but applying it in different areas. So I thought that was something good that came out of it.' The last teacher noted that after her team had 'shared with this the whole school, there was the P.E. (Physical Education) department for example was keen to use, for their performance-based task, to use the rubric'. All four

teachers expressed personal and professional elation and pride in being able to share what they considered were best practices with the wider teaching community.

Impact on teacher learning

The teachers reported three types of teacher learning: (a) learning to communicate with colleagues, (b) learning to give feedback after lesson observations, and (c) learning from other teachers. Of the three, the teachers learnt most from one another. One teacher commented that she *'learnt a fair bit from the teachers I observed'*. For example, one teacher said *'I did find out something that she does differently in terms of journaling'*. Another commented that *'her reflection allows me to see that maybe what I planned is not suitable for that particular classroom context'*. The teachers valued learning to communicate more with one another. One teacher commented, *'We don't often spend much time knowing one another, and working together takes a lot of effort'*.

Impact on teacher motivation

The majority of the teachers felt more motivated after having completed their research study. Some expressed a desire to do another piece of research should the need arise:

Although the journey was as I said was very challenging because of the time, but if it comes in into what I'm going to do next, then if it needs research I will I may embark on it as it gets easy. I think that the first step, the ELIS was a first step, but it was definitely a good first step.

One teacher was motivated to move to a higher level by saying *'want it to be more impactful, I want it to be published internationally'*.

Another teacher was more motivated to explore and try new things as a result of having engaged in research:

I feel that sometimes when you don't do this form of research, you tend to have a very myopic view of certain things. So when you actually read up, because when you do research, you definitely have to look through certain journals, certain articles, certain readings, you know of different kinds of opinions that the other people may have. So it really opens it up, and you realise that there are more towards things, and they are things that you can actually try to explore, to try it out. Because in terms of research, I find sometimes in school, it's more of us trying to give it a try to see whether whatever that we are trying works or not. Of course if it doesn't, then what went wrong? How can you further improve on it? If it works then it's good, and we should share it with the others if it really works.

Discussion and conclusion

In summary, the findings suggest that the teacher researchers believed that, by having participated in a research project, their research experience had had an impact on their teaching practices, learning and motivation, student learning and engagement as well as the educational community. As stated earlier in this report, this study hypothesised that teachers who have engaged in their own classroom research are more likely to have experienced changes to their habits of mind regarding their pedagogical practices. This is the result of their reflection on their teaching and student learning with other teachers and professionals. The teacher researchers that have participated in this study have adopted a certain stance of inquiry towards teaching and learning. They have also adopted the habit of sharing successful pedagogical practices with others.

The findings of this study concerning the impact of classroom research corroborate those of prior research (Borg, 2010; Queenan, 1998). It was found that the teacher researchers of the present

study began to focus more on student learning and engagement and that they were more reflective regarding their own pedagogical practices. It was also found that they worked in a supportive context for engaging in research and learning from research, as postulated by Leat et al. (2015). They received considerable internal and external support during the research process. However, many still found that time to engage in research was an enormous challenge.

As more and more teachers engage in classroom research and develop habits of mind concerning engaging in classroom research, this can result in the building of a research or inquiry culture as teachers share their research findings by way of the publication or presentation of findings pertinent to effective pedagogical practices. This research culture could be developed with more collaboration among teacher researchers, along with ELIS and university researchers and mentors. It is hoped that this will in turn generate new ideas for improving the teaching and learning of the English language and lead to the transformation of learning among teachers and students.

Recommendations

The availability of time and support resources, as well as administrative support for classroom research by teachers, were thrown up as major issues of concern that can hold back teachers from embarking on research studies within their own classrooms. It is recommended that the following learning plan be considered to enable teacher researchers to engage in and with classroom research, based on the qualitative analysis and evaluation of the results of this study (see Table 2).

Table 2

Learning plan for support of teacher researchers

Areas of Support for Teacher Researchers	Current Resources and Support	Desired Resources and Support
Workload distribution	Not enough time within their daily teaching schedules for teacher researchers to discuss, plan and conduct classroom research.	Offloading of some teaching duties to make time for the preparation and conduct of study
Research funds	ELIS Research Fund for research pertaining to the use and teaching and learning of the English language	MOE/NIE research funds for other areas
Resource support a. Resources such as materials, equipment and/or IT tools for curriculum purposes in classroom research study. b. Human resource such as part-time research assistants to help with	Provision of materials e.g., technological tools, equipment and expertise such as technician in school to provide IT support for tools needed for classroom research study.	Collaboration with external parties for procurement of tools and support where relevant and necessary.

Areas of Support for Teacher Researchers	Current Resources and Support	Desired Resources and Support
data collection, data entry, data collation, and even data analysis.	Funding for transcription of interviews and classroom video data.	
Professional support	<p>Research experts from ELIS for quantitative and qualitative analysis.</p> <p>Research mentors from NIE/MOE/NUS/NTU</p> <ol style="list-style-type: none"> research design, analysis and evaluation of research study data, writing research reports 	<p>Research mentors from NIE/MOE/NUS/NTU to guide teacher researchers in:</p> <ol style="list-style-type: none"> research design, analysis and evaluation of research study data, writing up journal articles, and guidance in sharing of research study at local and/or overseas conferences
Sharing of research findings	<p>Sharing platforms include:</p> <ol style="list-style-type: none"> Department and school professional sharing, Cluster professional sharing, and ELIS conferences 	<p>Guidance given by ELIS concerning additional sharing platforms to include conferences organised by:</p> <ol style="list-style-type: none"> MOE NIE NUS/NTU Other research organisations, both local and overseas, e.g., APERA, AERA. <p>ELIS Research Team could send out a list of possible conferences available in the following year.</p>

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