The Ins and Outs of Teamworking: When University Teachers, in-Service Secondary Teachers and Pre-Service Teachers Collaborate to Transform Learning

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Abstract

Initiatives for teachers' professional development should rely on the epistemology of practice, that is, be founded on the premise that reflective teachers construct professional knowledge and develop professional skills through practice and through planning, observing or analysing practice. Reflection about teaching action and reflection in teaching action triggers innovation, especially when teachers work together to create the necessary conditions to transform learning. This paper advocates in favour of collaborative action research and innovation as a methodology to promote change in classroom practices. To illustrate this proposal, it presents a case study in which a secondary English teacher from a school which hosts adolescents at risk opens her classrooms to a researcher and a group of pre-service teachers with the objective to reflect upon her own practices and to become an agent of change. Our corpus is made of natural audio-recorded data from the discussions emerging during focus-group sessions held to evaluate the ongoing innovation and interviews to participating secondary students and trainee teachers. The analysis of those interactions will first lead us to reflect upon the challenges of promoting change in the classrooms. Then it will allow us to understand the impact of the experience and argue in favour of a model of teacher education based on team work as a tool to acquire professional skills and guarantee students’ learning success.

Keywords: innovation, professional development, teacher empowerment, teamworking, secondary education

1. Introduction

Studies conducted by EU policy makers (see for example, Council of Europe, 2015), among others, relate competences in foreign language with good rates of youth employability at both national and international levels. Research also highlights that there is a wide achievement gap in educational outcomes between affluent and low-income students (see, for example, Reardon, 2011). The confluence of these results indicates that, to make a significant contribution towards a more socially just education, efforts need to be made to favour the development of foreign language communication skills of socioeconomically underprivileged youth to guarantee they have more equitable job opportunities in the future.

In Catalonia, English competency evaluations of secondary students administered by national educational authorities at the end of the compulsory education period (students aged 15-16) provide reliable information about how well-prepared young people are to participate successfully in communicative situations conducted in this language. Results confirm the existence of an achievement gap between students in schools sited in rich areas and students from schools in poor areas. Tests scores should undoubtedly serve to orient both policy makers and educators towards the kind of actions they need to take to maintain positive scores in those educational establishments in which students outperformed the country’s overall performances; however, they should also trigger all educational stakeholders to act to improve (and reverse) low scores, especially in poor areas.

The students in the two high schools of a socioeconomically underprivileged town sited in the outskirts of the city of Barcelona (Catalonia) tend to obtain significant low performance scores in all school areas in this annual national test. Consequently, the school governing bodies in those two institutions feel there is an evident need for revision of their teaching approaches. With this in mind, they are currently working in collaboration with social and educational professionals from a nearby university to innovate. The research project presented here departs from the groundwork established through
this joint work and is founded on the belief that significant teaching innovation necessary to improve the students results in English is only possible through initiatives that empower in-service teachers and helps them become true agents of transformative language education practices. Thus, the research project will serve as a means to trigger changes in classroom practices through the creation of collaborative teaching teams formed by members of the research group, teachers already exercising their profession in the two high schools involved and student-teachers. Thus, by combining the principles of ‘collaborative research’ and of ‘action research’, they will all work together in the design of technology-based innovative language teaching projects. Data collected during the focus groups devoted to the design of those interdisciplinary projects or to the evaluation of their implementation will serve to examine the whole process.

In this paper we want to explore how participants (in-service and pre-service teachers, researchers and secondary students) reflect upon classroom practice and if their views on what they do indicate that they see change as a positive methodology to empower the agents (and the receivers) of changes. First, we will present and discuss, from a theoretical point of view, the principles of what we refer to as ‘collaborative action research and innovation’ (Masats et al, in process). Then we will contextualise our study and analyse natural oral data obtained during team meetings. We want to see how reflection in a collaborative context can transform thinking and one’s own teaching practices. By doing so, we expect to contribute to the development of a model of teacher education that nourishes the joint work of researchers, in-service teachers and pre-service teachers to promote reflective practice and to ensure the development of professional skills as a tool to guarantee students’ learning success, in this case, in English.

2. Collaborative action research and innovation

Burnard, Apelgren and Cabaroglu (2015) argue that the knowledge generated by teachers when involved in activities of reflective practice improves their students’ degree of learning. Consequently, to improve students’ performance, it is essential to promote the empowerment of teachers. Empowerment is “a core value and developmental process that includes building skills through repetitive cycles of action and reflection that evoke new skills and understandings which, in turn, provoke new and more effective actions” (Kieffer, 1984, cited in Cohen, Chávez & Chehimi, 2007). It is also a social action that promotes participation to gain control over one’s lives through acting with others to generate change (Wallerstein and Bernstein, 1988). In the field of education, the notion of empowerment relates to the concept of awareness as described by Freire (1973); that is, empowerment brings together three dimensions: (1) the personal (self-confidence and consciousness of own capabilities); (2) the relational (ability to negotiate the nature of a relationship and modify it) and (3) the collective (ability to collaborate to multiply the effectiveness of initiatives (Rowlands, 1997)).

Initiatives for teachers’ professional development should promote interaction to be effective (Wenger, McDermott & Snyder, 2002) as change can only stem from knowledge inherent to practice through processes of reflection on teaching practice and about teaching action (Engeström, 2001; Engeström & Sannino, 2010). Critical reflection “blends learning through experiences with theoretical and technical learning to form new knowledge constructions and new behaviours or insights” (Shandomo, 2010, p. 101). The adoption of this perspective places research on the interactionist paradigm, derived from Vygotskian’s views on the socio-cultural theory which argue that interaction and cognition are indissolubly linked through socially located verbal activity. Consequently, competencies, in general, are context sensitive, and, therefore, adaptable (Mondada and Pekarek Doehler, 2004; Nusbaum, Escobar and Unamuno 2006). In this context, the development of professional competences does not only relate to what teachers do in their classrooms but on how they view what they do. Collaborative research, related to Freire’s collective dimension of awareness plays a key role along this process.

Collaborative research in the field of education as described by Nussbaum (2017) is framed within the principles of action-research (Lewin, 1946) and understood as a process of reflecting upon teaching practices with the objective of improving them. This process is cyclic and develops through different stages. First, teaching teams observe classroom dynamics or examine their own practices and identify challenges. Then they seek answers to resolve those challenges by designing collaborative classroom projects and educational activities which they will later implement together. Finally, they will analyse and discuss their intervention, and identify new challenges. Innovation is inherent to the adoption of this type of collaborative research, which we will refer to as ‘collaborative action research and innovation’ (Masats et al, in process). Both innovation and research that innovative action is carried out by teams composed by in-service teachers and researchers, whose members co-plan, co-implement and co-evaluate an educational innovative intervention to improve classroom practices and co-construct new knowledge on how learning takes places. This process often entails other actions such as co-collecting, and co-interpreting data obtained during the processes of planning, implementing and evaluating change; and co-authoring texts to disseminate the results of their intervention.
This model of introducing change in schools has, according to Nussbaum (2017), two key advantages. On the one hand, researchers can, along with in-service teachers, acquire teaching experience, contrast theory and practice and obtain ideas for new research. On the other hand, teaching teams can, together with researchers, share concerns and reflections about classroom practices. Consequently, in-service teachers and researcher are both expert members of the same community of practice. The notion of community of practice, of anthropological origin, explains the success and failure as a process of exclusion / inclusion in a group. Success in collaborative action research and innovation is guaranteed because teachers and researchers have the same rights within the community of practice they jointly create, which avoid traditional hierarchical processes of conducting research at schools not well-accepted by teachers (Unamuno, 2004). Likewise, this collaborative model of knowledge construction has also benefits for the training of pre-service teachers.

Research shows that the paradigm Schön (1983) refers to as ‘technical rationality’, based on a process of knowledge transmission rather than on a process of knowledge building does not results in sustained improvements in educational practice. To be effective, pre-service teacher training proposals should depart from the need to include them in existing collaborative community of practices. In this case pre-service teachers are 'newcomers' who, through a process of socialization, acquire expertise to participate in community-based practices. The mission of the expert is to provide the ‘newcomer’ with legitimate access to the community practices (Lave, 1991). But learning is not hierarchical as the participation of teams formed by expert teachers and researchers is also modified thanks to the presence of non-expert teachers, as the former learns new ways of teaching and new ways of participating during the process of adapting their mediating role to the needs of the latter (Mondada and Pekarek-Doehler, 2004; Wilhem, Baker and Dube, 2001).

Collaborative action research and innovation puts forward the collaborative model between schools and educational faculties proposed by Tsui (2009). The authors described the practices of collaborative practicum centres, called Professional Development Schools in their study, characterised by the fact that trainee teachers were welcome to participate in the school research and innovation projects. Collaborative action research in teacher training programs (see Masats et al., 2007, Dooly and Masats, 2007; González et al., 2008, among others) has also had an impact on transforming classroom practices, on constructing know-how knowledge and on the development of participants' professional competences. On the one hand, future teachers learn through practice ‘to become a teacher’, on the other hand, in-service teachers can, through the processes of planning, implementing and evaluation classroom projects, improve their performance in the task of ‘being a teacher’ and, lastly, researchers, by getting closer to the reality of the schools and the needs of students, they learn how to conduct research that can contribute to innovate in schools. Figure 1 illustrates this idea:

![Figure 1. The collaborative action research model (Nussbaum, 2013)](image)

3.- The study

As we have argued, collaborative action research and innovation has a two-folded objective. On the one hand, it seeks to contribute to innovation in schools and, on the other hand, it examines the viability of those innovation proposals, which as we said earlier, developed from the joint work between the different groups that make up the research team. In this paper, innovation is targeted to the development of the interactive competence in English of secondary students in a socioeconomically underprivileged milieu. In-service teachers, researchers and pre-service teachers collaboratively design, implement and evaluate authentic and interdisciplinary teaching projects that involve the use of digital tools. Research is
related to the evaluation of the innovation proposal and wants to analyse to what extend collaborative action research contributes to the co-construction of know-how knowledge and the development of professional teaching skills.

Data is obtained in the classrooms, during teacher training seminars and in focus group sessions to either create innovation projects or discuss the ins and outs of their implementation. Alternatively, we also conducted interviews to collect the perceptions of students about what we do. Likewise, two years later, we contacted pre-service teachers to see how, now that they are in-service teachers, perceive the experience they had lived. In this paper, we will apply the principles of Conversational Analysis (CA) to analyse the data collected during a focus group planned at the end of the first school year in which collaborative action research and innovation was part of school practices and the response given to us by one of the pre-service teachers in the study and co-author. CA defends two main ideas, on the one hand, the importance of collecting natural data (data of students and teachers performing educational tasks in the classroom, data on the interactions between teachers during the planning processes of class sessions, interview data, etc.) and, on the other hand, the need to analyse the phenomena as they emerge during the interaction. This means that the analysis cannot depart from hypotheses built by researchers, instead, it must be constructed from the observation of what participants do while they reflect upon their teaching actions and how they perceive what they do. This model is, thus, based on the premise that “reality and meaning are built in social interactions and that it is in the interaction itself where you have to look for the keys to their interpretation” (Nussbaum and Unamuno, 2006 p.16, own translation). This premise is basic in qualitative research in general, and in ethno-methodological studies in particular (Sacks, 1992). The validity of this type of research relies on three basic principles: the principle of observability, the principle of availability and the principle of symmetry.

The principle of observability was proposed by Garfinkel (1967) and, according to Mondada (2003), is related to the notion of descriptivity (accountability) of phenomena. Researchers need to explain how the speakers create their discourse. This implies observing which issues become relevant during the interaction. The principle of availability, by this author, has to do with accurately collecting, observing and analysing natural data. Finally, the principle of symmetry argues that those who analyse the data collected (Mondada, 1998) are also part of the corpus and, therefore, their actions need also to be observed.

4. The findings

4.1. Students’ voices

Before analysing how pre-service and in-service teachers reflect upon their practices, we thought it relevant to hear students’ voices on what they have done. In extract 1, the researcher (also a teacher in the group) interviews one student with a good command of English, who, as we will see below, compare various learning contexts: learning English in primary, in secondary and in language schools.

Extract 1. Interview with an advanced student at the end of his first high school year (aged 13)

Researcher: ok! e:m:_(.) are the classes here in the high school very different from the classes in primary/

Izan: yes\(\) of course\(\) in primary the level was very very easy with basical wo:rds and very easy and now in the high school is a little bi:t nxt more hard\(\) we nxt we work the things more funny like the ipads with with_ our mobile phones and_ I think that is a good site because e:m: English site to learn it’s more good\(\)

Researcher: ok! and is it different from learning English in: a school/ outside/ you said you go to a language academy/

Izan: yes e:m: comparing the high school with the English academy the high school is very easy because in the English academy_ nxt our teachers_ nxt the: level it’s more hard\(\) the teachers of here have a good e: level of English but_ with the level of the other partners they can’t e: do_ th: things more hard because e the: the: students than we know English very good and there are a very: small group\(\) in my class\

In this extract, we can see that this student has observed there’s been a methodological shift between how English was taught in primary and now in secondary. The fact that he values the use of ICT tools as learning instruments to access English validates, somehow, the effort made by teachers to create technology-enhance multidisciplinary projects. Izan is, though, critical with the fact that in the secondary school, unlike what he observes in the language school he attends as an out of school activity, he is in a mixed-ability class. We can observe the various levels of English in extract 2, in which the researcher needs to use Spanish and Catalan in the interview.
Extract 2. Interview with a beginner student at the end of his first high school year (aged 13)

Researcher: y las clases eran diferentes /
Fran: sí /
Researcher: por qué/ xxx
Fran: porque no hacíamos lo mismo/ hacíamos un cuaderno y ya está /
Researcher: mm/ te gustan las clases de aquí /
Fran: sí /
Researcher: por qué /
Fran: porque son divertidas y: aprendo más que: en primaria /
Researcher: mm/ qué has aprendido/ de inglés /
Fran: pues lo de reciclar_ lo de: las- eh- lo del árbol /
Researcher: mm /
Fran: m/ a hacer proyectos mejor_ porque no s- porque me salían tan bien_ y éste quién es/ y éste quién es/ no/ pero una vez que estuve /
Researcher: i qué agradaría aprender /
Fran: de inglés /
Researcher: si/ en catalán/ contesta en catalán /
Fran: parlar millor /
Researcher: parlar millor/ i: com pots aprendre a parlar millor /
Fran: eh: como se dice/ esperá/ eh: practicant /

Researcher: and the classes were different /
Fran: yes /
Researcher: why/ xxx
Fran: because we did not do the same/ we did_ a workbook and that was it /
Researcher: mm/ do you like the classes here /
Fran: yes /
Researcher: why /
Fran: because they are fun/ and: I learn more than: in primary /
Researcher: mm/ what have you learnt/ of English /
Fran: well that about recycling/ about: those- eh- that about the tree /
Researcher: mm /
Fran: m/ to do projects better_ because they did not/ I did not do good ones/ and don’t know/ many things /
Researcher: and what would you like to learn /
Fran: of English /
Researcher: yes/ in Catalan/ answer in Catalan /
Fran: speak better /
Researcher: speak better/ and: how can you learn to speak better /
Fran: eh: how do you say it/ wait/ eh: practising /

Again, the student in extract 2 values positively the methodology used by the teacher. In this case he stressed the use of project-based learning and he feels he is better at that than at doing exercises in a workbook. He also mentions he would like to improve his speaking skills, which is significant because he did not accept to (be recorded and) speak in English during the interview although he admits that learning is only possible through practice.

4.2. The voices of in-service teachers

As collaborative action research and innovation relies on teamwork, during the lessons children are in contact with different teachers at the same time. Fieldwork observation revealed that the present of many adults was not always easy because there was not always time to include pre-service teachers or volunteers in the planning process. The researcher inquired one of the in-service teachers in the team about that.

Extract 3. Team-focus group at the end of the first school year: two team members talking

Researcher: pero:/ pero claro/ també ha de ser difícil no/ m: tens més mans/ però també: gestionar això ha de ser complicat/ no /
Teacher 1: bueno/ a-i- comencen_ va ser: complicat/ de cara als nens/ perquè acostumes a tenir més gent a l’aula:/ i: aviam i era/ y éste quién es/ y éste quién es/ no/ perú una vegada ja saben els noms/ ja els coneixen/ saben que rene:nt_ hi han/ no hi ha hagut cap problema/ de fet ara/ hem tingut un parell d’inclusions noves/ i només han dit_ com se diu/ ja està i ha quedat així no/ excepte la Juna:/ i: jo crec que en general/ ells tenen la sensació:/ també: els hi he fet veure_ que tenen/ una oportunitat que no han tingut a la vida./ l’han d’aproveitar/ i jo crec que sí que ho fan /

Researcher: but:/ but of course/ it has to be more difficult right/ m: you have more hands/ but also:/ managing this must be: complex [right] /
Teacher 1: well a-i- the beginning it was complex for the kids/ because you have more people in the classroom/ and:/ well and it was/ and who’s this/ and who’s that/ no/ but once they learnt their names/ they know them/ they really know/ there is:/ there’s been no problem/ in fact now/ we have had two new assistants/ and they have only said:/ what’s her name/ and that’s it/ and that was all right/ except for Juna:/ and:/ I believe that in general/ they have the perception/ and I have also:/ made them see:/ they have_ an opportunity unique in their life/ and must take profit from it/ and I feel they are doing it/
As we can observe in extract 3, the teacher does not mention any drawback related to the planning phase when she values the presence of other adults (pre-service teachers and volunteers) in her lesson. Her agenda is different from that of the researcher, and she analyses the role of adults from the students' perspective and from what they can gain from it. It has to be mentioned that volunteers were international students from the nearby university with no command of Catalan or Spanish and therefore students were 'obliged' to address them in English, something they did not always do when addressing the teachers.

The collaborative action research and innovation project was carried out only in year one classrooms and therefore only the English teachers who taught in one of those classes could participate. In the last focus group carried out at the end of year one, team members invited all the teachers in the English department to exchange glances on what had been done that year. Extract 4 presents the views of one of the teachers in year 4.

Extract 4: Team focus-group at the end of the first school year. One team member talking to a teacher not participating directly in the innovation.

| Teacher 2: no sél jo també: ho valoro molt_ sobretot això: la oportunitat de: que se'ns va donar de poguer introduir: new methodologies i: i treballar: diferentment a: d'una altra manera que també s'estava:_ els alumnes també {d'alguna manera (riu)} m'ho demanaven_ veus que no:_
Researcher: però tu per exemple_ que has estat com una mica a fora perquè com que hem decidit començar a 1r_
Teacher 2: sí
Researcher: i tu estàs a 4t_ no/ com has viscut això de:_ estar a dintre com fora (riu)
Teacher 2: e:h_ pues això estic dintre però estic fora! (riuen) bueno_ n:ó bé bèl perquè vull dir_ el recolzament que he tingut de vosaltres: de: de la formació_ abans no sé amb qui ho comentava_ n'hi ha hagut una de formal_ però també n'hi ha una d'informal_ perquè:_ m'he pogut aplicar coses a: 4t\ sí\ sí\ sí\ que sí que sí m'ha servit_ moltissim\ a més la disposició que heu tingut vosaltres és que:_
Teacher 2: I don't know\ I also appreciate it a lot_ especially this the opportunity of:_ we were given of introducing_ new methodologies and_ and working_ differently which was also_ students were also {somehow (laughs)} asking me that I was aware it was not_
Researcher: but you for example_ has been left out a little bit_ because we decided to start with year 1_
Teacher 2: yes\ Researcher: and you are in year 4_ right/ how did you live this:_ being in and out/ (laughs)
Teacher 2: e:h_ well that's it! I am in but I am out! (laughs) well\ n:ó well\ well because I mean_ the support I got from you all and: specially from you; is- wow! I mean it's been even that it was in the canteen: talking about: don't know what: I mean_ the advice and: the training_ I can't remember who I was saying this earlier_ there's been formal training_ but also informal\ because:_ m_ we talk a lot and_ exchange many things\ I mean_ yes\ I have n: not been in year 1 but_ well_ I have been able to apply things in year 4\ yes\ yes\ yes_ sure yes they were useful for me! very much so! and then your eagerness was wow:_

Extract 4 is interesting because it illustrates the empowering value of collaborative action research and innovation model. In the first line, the teachers value the fact of having given the opportunity of being an agent of innovation when, in her case, that was not, in theory, the idea because projects were only planned to be implemented in year one groups. Then the researcher inquires her about that by referring to her as someone who was simultaneously out of the project (from the researcher’s viewpoint) and in the project (from the teachers’ point of view). She laughs at the researcher description of her...
role in the project (be in and out) and makes an interesting point by acknowledging the fact that reflection on teaching did also occur in casual conversations at the canteen and to her, that was like a springboard that move her to make changes in her lessons, partially also because she felt her students were indirectly also ‘demanding’ change.

4.3. The voice of a pre-service (now in-service) teacher

Finally, we decided to ask one of the pre-service teachers to reflect, two years later, about what she felt she had learnt from the experience of taking part in a collaborative action research and innovation project. This is what she wrote:

Extract 5: Message from one of the pre-service teachers in year one to the researcher:

Two years later, what I can say is that being a member of the project allowed me to put into practice what I was learning at the university, but at the same time I was aware of what reality looked like. At the university we were often discussing or envisaging utopic situations far from what really happened at the host school. Probably children did not learn as much English as we expected but I think we changed their views on education and how they saw themselves in a formal learning environment. I think we contributed to help them create more positive expectations on their potential as learners. Similarly, the fact that I very often felt I was being a model for the students helped me gain self-confidence as a teacher.

Their reflections are interesting because indirectly, she is pinpointing one of the advantages of the collaborative action research and innovation model: it bridges the gap between theory and practice. Researchers make the results of research available to teachers; but teachers offer researchers real classroom situations in which to act and investigate. Pre-service teacher, as member of the collaborative teams who conduct research and innovation witness and can establish links between what they have learnt and what they are experiencing. Besides, being one of the members of the team helps them construct of a positive image of themselves as teachers, and, in turn, they contribute to help learners construct a better self-image as learners and as people able to learn and use a foreign language; a very positive side-effect, which is extremely necessary in a milieu such as the one in the study.

5.- Conclusions

In this paper we have claimed that significant teaching innovation is only possible through initiatives that empower teaching teams in schools and lead them to become true agents of transformation and improvement. Innovation, though, should stem from solid theoretical background foundations as well as from actual teaching experiences. Consequently, researchers should be committed to the educational community as research ought to bring to classrooms new educational practices to solve didactic challenges. Yet, doing research by applying hierarchical top-bottom processes of knowledge construction does not benefit innovation because teachers are sceptical with regards to the researchers’ intentions (Unamuno, 2004). ‘Collaborative action research and innovation’, on the contrary is a methodological proposal to promote change in teaching practice that departs from the belief that innovative teaching proposals should be designed and implemented together by teams composed of in-service teachers and researchers. Likewise, to guarantee innovation in school practices, innovation should be part of classroom educational practices in initial teacher training programmes. Teaching for innovation is the responsibility of professionals in Education Faculties; but cannot be achieved without in-service teachers. professionals from the secondary schools where student teachers are developed. ‘Collaborative action research and innovation’ also offers pre-service teachers to work, during their school internships, together with in-service teachers and researcher to transform learning.

In this paper we have heard the voices of all people involved in a ‘collaborative action research and innovation’ proposal carried out in the English class of a high school in a socially socioeconomically underprivileged town near the city of Barcelona (Catalonia). We have observed that secondary students, regardless their command of English, have experienced change in the classroom and value it positively. Yet, the advanced student feels that mixed competence levels in English is a problem for teachers and not so advance learner does not feel comfortable using English although he admits he needs to practice it to improve. In this sense, their English teacher values the presence of in-service teachers and international volunteers in the classroom as they create a real context in which students need to use English to communicate. The presence of so many adults in the classroom only occurs in year one classrooms as the research/innovative proposal is targeted at these groups: Yet, we have also observed that other teachers not directly involved with the experience, also benefit from it through the informal conversation with the researcher and her fellow teachers. This proves that when researchers establish non-hierarchical relationships with teams of teachers, learning takes place through symbiotic processes: in-service teachers receive support and expertise knowledge from researchers, who, in turn, benefit from
watching skilled professionals in action, who also orient them towards which phenomena/actions are worth investigating with the objective of improving classroom practices. Finally, we have seen that opening the research/teaching teams to pre-service teachers is another empowerment action that benefits the teams, who need to discuss and adapt their proposals to transform it into a training proposal for future teachers; it has a positive impact on future teachers as they gain self-confidence and whose support to secondary students guarantees more equal learning opportunities for all.

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