Cómo referenciar este artículo / How to reference this article

Codó, E., & Moore, E. (2019). Working Through Asymmetries of Knowledge and Expertise in a «Giving Back to the Field» Session. *Foro de Educación*, *17*(27), 147-165. doi: http://dx.doi. org/10.14516/fde.699

Working Through Asymmetries of Knowledge and Expertise in a «Giving Back to the Field» Session

Eva Codó

e-mail: eva.codo@uab.cat Universitat Autònoma de Barcelona. Spain

Emilee Moore

e-mail: emilee.moore@uab.cat Universitat Autònoma de Barcelona. Spain

Abstract: This article examines a «giving back to the field» experience in a state-funded faith school in Catalonia (Spain), where we conducted ethnographic fieldwork on the introduction of English as a vehicular language in compulsory schooling. After two years of observing pre-school, primary and secondary education classes, attending meetings, and interviewing teaching staff and administrators, we were asked by the primary school coordinator to hold a training session in June 2017 as university «experts» acquainted with the institutional context. The school had been teaching extra hours of a subject taught in English named Science, but teachers were only partially satisfied with the results. In addition, an educational consultant that the school had recently hired had suggested that these Science classes needed to be reformulated. In this paper, we shall trace the preparatory email messages that we exchanged with the primary school coordinator, as well as the discursive development of the two-hour face-to-face session, which was attended by over fifteen teachers and which we audio recorded. We discursively dissect the ways in which a shared understanding of the problem and of possible solutions was constructed. We also analyse how expertise is enacted in interaction and contributes to the meeting outcomes. We suggest that our approach was in line with collaborative, reciprocal and transformative research paradigms drawing on the close relations with some of the participants and the in-depth knowledge of the school culture that had developed out of our two-year ethnographic engagement with the field.

Keywords: «Giving back»; reciprocity; joint problem space; enactment of expertise; language-in-education ethnography.

Received: 09/07/2018 Accepted: 06/03/2019

Foro de Educación, v. 17, n. 27, julio-diciembre / july-december 2019, pp. 147-165. e-ISSN: 1698-7802

1. Introduction

In recent decades, the call for increased researcher reflexivity has been generalised across the social sciences. As a result, «extractive» types of research have given way to more collaborative endeavours. Different proposals have been put forward to ensure that less exploitative and more equitable and democratic relationships are established between researchers and those who are «researched» [see Cameron, Frazer, Harvey, Rampton & Richardson (1992), for a distinction between «ethical», «advocate» and «empowering» research]. A history of colonial scholarship, which «took» knowledge from subjects without acknowledgement or compensation, provides a backdrop to these proposals, as do numerous examples of medical tests which abused vulnerable populations for research purposes. Whilst Institutional Review Boards have developed ethics protocols that researchers must abide by, Gupta and Kelly (2014) highlight that ethics cannot be reduced to protocols and that «most of us want to be able to say "thank you" in meaningful, useful, and culturally appropriate ways» (p. 1).

«Giving back» to one's research informants is usually framed as an act of «reciprocity»; that is, providing a return for the generosity of those in the field (Gupta & Kelly, 2014). Reciprocity is viewed as an ethical requirement in all research efforts, but especially in qualitative studies, because of the dedication and close engagement that qualitative research, and ethnographic research in particular, demands from participants (Hatch, 2002). However, the whole idea of giving back is not unproblematic; it has been called into question, for example, in indigenous and feminist studies [see Andersen & O'Brien (2017)] where giving back is viewed as a way of reinforcing binaries and boundaries between researchers and the researched. Instead, what is proposed is to construct research as an opportunity for conversation and knowledge sharing, and not just for gathering data.

In this paper we would like to bring together the ideas of reciprocity, thanking informants in meaningful ways, and engaging in conversation with them, in discussing our «giving back» experience in the context of a language-in-education ethnography conducted in a multilingual school in Barcelona (Spain). At the end of our two-year engagement with the school, we were asked by the primary coordinator (Maria) to hold a training session for the language teachers. They were dissatisfied with Science, a non-core content course that was taught in English to increase students' exposure to that language and raise their proficiency. A priori we were positioned as the «experts» and expected to tell the teachers what was «best» for them to do. However, we aimed to give back in a way that was transformative, served the community meaningfully and had long-lasting effects. As ethnographers we had been able to identify some weak spots in the school's organisational culture, which translated into teachers' feelings of disenchantment with the school, perceived lack of professional recognition and a real lack of coordination in relation to pedagogical issues. For these reasons, we decided that rather than simply staying at the level of reflection or joint knowledge construction (however important these might be). the session should empower the teaching staff to organically constitute themselves as agents of change. This goal is in line with the focus of recent ethnographic scholarship, which has explored the possibilities and limitations of ethnographers' work for social change [see Martin-Jones & Martin (2017)]. Yet, in most studies (e.g. Van der Aa & Blommaert, 2017) «return to the field» sessions are glossed over rather than systematically analysed to understand what gets achieved (or not), and how actors collude in working towards specific goals. In that sense, this article fills an existing gap by examining in detail one such session, and discussing what was effectively accomplished and through what means.

In this paper we ask on the one hand, how the researchers and the school faculty work together to collaboratively define the reason for their coming-together, and on the other, how participants perform and are attributed expertise in the process, and finally what the consequences of such relationships to knowledge and action are for the meeting outcomes. Our contribution is organised as follows. In the following section we present the theoretical inspiration that guides the analysis of the data presented in the article: the email exchanges prior to the session, and the audio-recording of the meeting interaction. After that, we introduce the ethnographic research that contextualises the data that we later interpret. We then present the analysis of the data, tracing how the problem and expertise in relation to the problem are discursively constructed. Finally, we offer some conclusions reflecting on our approach to "giving back".

2. Theoretical framework

Here, we zoom in to focus on the theoretical contributions which guide the analysis presented. We are inspired by two main conceptual frameworks: joint problem space and enactments of expertise, which we develop in the following two subsections of the article.

2.1. Joint problem space

Firstly, we draw on the notion of the *joint problem space* put forward by Teasley and Roschelle (1993), and Roschelle and Teasley (1995). Although these authors proposed the idea of the joint problem space based on research in a very different context from our own (they focus on computer-mediated collaborative problem-solving activities), we find their definition to be very pertinent to understanding our data. According to these authors, the joint problem space is a shared structure of knowledge that helps sustain activities oriented at problem-solving, such as the training session we focus on in our analysis, by integrating: (a) goals; (b) understandings of the current state of the problem; (c) awareness of available actions for solving the problem; (d) associations linking goals, characteristics of the current problem state, and actions that are available.

As Sarramiento-Klapper (2009) argues, the concept of joint problem space should be conceptualised as fundamentally being an outcome of group interaction rather than being a factor of individual cognition, and this is indeed the stance we take. Such locating of cognition in the here and now of social life is reminiscent of Hutchin's idea of *cognition in the wild*, which is more innate to the anthropological/ethnographic tradition that frames our research. A cognitive scientist, Hutchins argued

for the use of anthropological rather than experimental methods for understanding how people think. Cognition in the wild, according to Hutchins (1995, pp. xiii-xiv):

[...] refers to human cognition in its natural habitat – that is, to naturally occurring culturally constituted human activity. [...] I have in mind the distinction between the laboratory, where cognition is studied in captivity, and the everyday world, where human cognition adapts to its natural surroundings. I hope to evoke with this metaphor a sense of an ecology of thinking in which human cognition interacts with an environment rich in organizing resources.

The analysis we present indeed suggests that building a shared sense of the goals of the «giving back» session, reaching a common understanding of the problem at hand, and agreeing on available options for solving it, is a dialogical process in which discursive objects and individual subjectivities come into play, are negotiated and are transformed in situated interaction.

2.2. Enactments of expertise

Similarly concerned with situated knowledge building, we also draw on the notion of *enactments of expertise*. We adopt Summerson Carr's (2010) approach to the phenomenon, with expertise being understood primarily as something that people do, not something that people have. That is, expertise is «intensively citational institutional action, rather than [...] a powerful cache of individual knowledge that is simply expressed in social interaction» (p. 19). Summerson Carr further argues that "the acquisition of a way of representing things, on the one hand, and knowing things, on the other, should not be conflated and that the former is the proper methodological loci for the study of expertise as enactment» (p. 27). That is, expertise, like other elements of socially-distributed cognition, needs to be studied as it is dialogically constructed in situated encounters between people and the material world.

While emerging in people's situated actions, according to Summerson Carr, expertise is also inherently ideological, in that it implies semi-stable hierarchies, often organised across institutional boundaries, that legitimise and afford worth to particular world-views and communicative practices. For example, those who can claim participation in status-conferring institutions, such as the university-based researchers in the data presented in this study (the authors of this article), have greater access to and experience with certain types and objects of knowledge, as well as ways of communicating that knowledge, that can be mobilised in interaction. Such power relations may be productive ones, as we shall argue in our analysis, while they may also be repressive ones.

In particular, in the analysis we focus on the processes of *authentication* and *evaluation* as constitutive of expertise, among other aspects put forward by Summerson Carr (including socialisation, institutionalisation, and naturalisation). Authentication is concerned with how would-be "experts" continuously work to authenticate themselves as such, and also to authenticate the objects (activities, artefacts, etc.) in relation to which they might claim expertise. Evaluation refers to a process in which people with claims to "special" knowledge are legitimised

to discursively represent people or objects. Ploettner (2019) uses the notions of authentication and evaluation to understand how expertise is interactionally achieved in a teacher development process that is slightly different from the one we study, but with some points in common, including a concern for reciprocity. Retaining these theoretical notions for the analysis, in the following section we present the context of the school where we collected the data and situate this study within the broader research project that frames our work.

3. Institutional context and method

The data analysed in this paper comes from a two-year ethnography (2015-2017) of the process of «multilingualisation» of a state-funded privately-owned school (escola concertada) located in a medium-sized city near Barcelona. It is a convent school that offers both compulsory and non-compulsory educational stages, from age 3 to age 18. The school, which we shall call Santa Creu (Holy Cross), is located in a post-industrial working-class/lower middle-class neighbourhood that began to gentrify in the early years of the 21st century; however this gentrification came to a halt with the economic recession of the last decade. Although the focus of our ethnography was on compulsory secondary education (ages 12 to 16), in line with the remit of the larger umbrella research project¹, we also conducted fieldwork in kindergarten and primary education classes. The goal was to understand how the intensification of English-language learning fit into a larger language-in-education project at the school.

In 2008 Santa Creu decided to introduce two more weekly hours of instruction in English following the precepts of CLIL (Content and Language Integrated Learning). The content area selected was science. According to Ester, the English teacher who led the initiative, they chose science because that was «what was fashionable at the time». The new subject, named Science, was taught alongside Medi Natural (the core science subject taught in Catalan). Consequently, students would study the same content twice, first in Catalan and then in English. They also had regular English as a Foreign Language (EFL) classes (2 hours weekly in primary education; 4 hours weekly in secondary education). Over time, the teaching staff had grown increasingly dissatisfied with Science for various reasons, many of which are alluded to in the interactional data interpreted in the following section. In 2016, the school hired an external consultant to improve the quality of their teaching, and in particular, to make it more competence-based, in line with the requirements of the Catalan national curriculum. One of the first areas for improvement the consultant identified was, probably not surprisingly, Science. The consultant suggested that the subject be made more communicative and less focused on science content. These recommendations were met with enthusiasm by some of the Science teachers, like

¹ The title of this project is APINGLO-Cat (The appropriation of English as a global language in Catalan Schools: A multilingual, situated and comparative approach), ref. number FFI2014-54179-C2-1-P. The project has a multi-sited design and includes two other schools apart from Santa Creu. For more information see http://blogs.uab.cat/apinglocat/. We thankfully acknowledge here the financial support of the Spanish Ministry of Science and Innovation to carry out this investigation. We also want to thank Dani Pujol for transcribing the data.

Lucila (also an EFL teacher), who from the very beginning was totally aligned with the «improvements» suggested. Against this backdrop, and as a way of «giving back», we were asked to hold a training session for teachers from across all grade levels in June 2017 and, as mentioned, we were positioned a priori as university «experts» acquainted with the institutional context.

3.1. Data description

Our corpus of data is made up of informal conversations and ethnographic observations (in class and in other school spaces) (22 visits); semi-structured indepth interviews with educators (language and content teachers), coordinators, school psychologists, and the head teacher (11 interviews); photographs of the school's landscape and the school's surroundings (177); audio-recordings of EFL and *Science* classes (approx. 10 hours); videorecording of a multilingual rap/hiphop activity run by the researchers for students (approx. 3 hours); class materials (2 full teaching units); and student productions (7 videos; 1 poster). We followed the protocol approved by the university ethics committee and asked all focal participants for informed consent. The «giving back» session that we examine in this paper was one of our last ethnographic engagements with the school (June 2017).

4. Analysis

Borrowing from the theoretical framework introduced above, the first aim of the analysis is to understand how a joint problem space was constructed both leading up to, and during, the meeting to discuss the *Science* subject. That is, we consider how a shared conception of the problem at hand was constructed by different actors. The second aim is to describe how expertise in relation to the joint problem space was enacted in real-time interaction between the members of the school teaching faculty and the university researchers. In this regard, the analysis will focus particularly on processes of evaluation and authentication of expertise that are produced in interaction, and will also consider the impact of the enactment of expertise on the meeting outcomes. The analysis will ultimately argue that, despite intrinsic hierarchies, the dialogue between the school's teachers and the researchers (re-) positioned the teachers as knowing and experienced professionals that were ready to take collective action.

Our interpretations are anchored in the sequential analysis of the discourse, focusing mainly on emerging topics and participant positionings, and draw on two sets of data: the transcription of the audio-recorded meeting, and a series of emails exchanged between the researchers and the primary school coordinator (Maria) who organised the session prior to the encounter. The analysis is organised under subheadings grouping sets of data which represent key sequential phases contributing to the final outcomes of the "giving back" process. Each subsection responds to both of the analytical themes: the negotiation of a joint problem space, and the enactment of expertise.

4.1. Negotiating goals and roles prior to the «giving back» session

Leading up to the meeting at the school, over a period of approximately 3 weeks, emails were exchanged between the two researchers (Eva and Emilee in the data) and between one of the researchers (Eva) and Maria (the primary education

coordinator). Besides agreeing on the logistics of the meeting, the interactions over email were significant as initial moves towards constructing the joint problem space that would provide the focus for the face-to-face conversation. Significant extracts from the email exchanges are reproduced sequentially in Table 1. For all of the data extracts presented in this analysis, the original text in Catalan is included first, followed by the translation (in italics) into English.

Table 1. Extracts 1-7 from emails exchanged between the researchers and the primary school coordinator

Ex- tract ID	Date	From	То	Extract
1	26/04/17	Primary school coordina- tor (Maria)	Resear- cher (Eva)	Ens aniria súper b que passes per l'escola per donar-nos idees per canviar science. It would be super good if she could come by the school to give us ideas for changing science.
2	08/05/17	Resear- cher (Emilee)	Resear- cher (Eva)	Què volen exactament? Em vas dir que volen pensar en temes per a projectes i saber com planificar un projecte, o algo així, no? What do they want exactly? You told me they want to think about topics for projects and to know how to plan a project, or something like that, right?
3	08/05/17	Resear- cher (Eva)	Resear- cher (Emilee)	Volien una sessió (1h o màxim 1.5) d'idees sobre què fer a les dues hores extra que tenen cada setmana d'anglès i en què ara fan Science. They wanted a session (1hr or maximum 1.5) of ideas about what to do in the two extra hours they have each week of English and in which they now do Science.
4	08/05/17	Resear- cher (Emilee)	Resear- cher (Eva)	O sigui, és només veure'ns i fer una pluja d'idees? Han pensat ells alguna cosa perquè nosaltres els podem guiar? Penso que seria bo que pensessin què volen fer, i nosaltres els ajudem portant alguns recursos, no? So then, it's just to meet and brainstorm? Have they thought about what they want to do? I think it would be good if they thought about what they want to do, and we can help by suggesting resources, right?

5	09/05/17	Resear- cher (Eva)	Primary school coordi- nator (Maria)	Heu pensat vosaltres alguna cosa perquè nosaltres us podem guiar? Penso que seria bo que penséssiu què voleu fer, i nosaltres us ajudem portant alguns recursos, p.e. [] Jo crec que estaria bé que es fes una reunió prèvia per saber exactament en què podem col.laborar. Have you thought about something so we can guide you? I think it would be good if you thought about what you want to do, and we help you by suggesting resources, for example. [] I think it would be good to have a prior meeting to know exactly what we can collaborate on.
6	12/05/17	Primary school coordina- tor (Maria)	Resear- cher (Eva)	Vaig parlar amb les profes i el que deien era que parlant amb la Roser ((external consultant)) volien canviar l'enfocament cap a situacions comunicatives però que no sabien com organitzarho. L'Ester va comentar que ella pensava que es podien fer activitats diferents per trimestre: per exemple, un trimestre teatre, un altre arts and crafts??, un altre situacions comunicatives [] També necessiten recursos per poder-ho portar a terme. I spoke with the teachers and what they said was that speaking with Roser ((external consultant)) they wanted to change the approach towards communicative situations but they didn't know how to organise it. Ester commented that she thought that different activities could be done each trimester: for example, one trimestre theatre, another arts and crafts??, another communicative situations [] They also need resources for putting it into practice.
7	12/05/17	Resear- cher (Emilee)	Resear- cher (Eva)	Jo els passaria 2 lectures [], una sobre projectes [] i un altra sobre content-rich teaching [] perquè els llegeixin abans d'anar nosaltres. Després, podem discutir els textos, parlar de si les propostes que hi surten encaixen amb el que volen fer els mestres, mirar alguns exemples de projectes, el procés de planificar per projectes, etc. I would send them 2 readings [], one about projects [], and another about content-rich teaching [] so they read them before we go, Then, we can discuss the texts, speak about whether the proposals that are in them would fit with what the teachers want to do, look at some examples of projects, the process of planning projects, etc.

The email exchanges are representative of how the goals of the meeting, the current state of the problem and available actions for solving it are initially negotiated, following the elements of the joint problem space set out by Roschelle and Teasley (1995). While it is clear that the problem prompting the training session is the need to make changes to the *Science* subject (Extract 1 and 3), the specificities of the problem (which are not made explicit in the exchange), the actions available to

solve the problem (implementing projects [Extracts 2 and 7], implementing activities focusing on communicative situations [Extract 6]), and the goals of the problem-solving encounter between the researchers and the teachers (Extracts 4, 5 and 7), remain more ambiguous. The researcher charged with leading the session (Emilee) suggests a response to this ambiguity based on her professional habitus as a university-based teacher educator – the reading and discussion of two texts discussing current trends in language teaching (Project-Based Learning and Content and Language Integrated Learning). The email exchanges conclude with Emilee sending the two articles in question.

Referring, then, to how expertise is enacted in this first set of data, it is clear from the data that the researchers' professional affiliation to a status-conferring institution – the university – means they are positioned from the outset as experts. The extracts also provide evidence of how the teachers are self-positioned as being less knowledgeable and in a role of receiving rather than contributing expertise: the researchers are appealed to «to give [the school] ideas» (Extract 1) as the teachers «didn't know how to» (Extract 6) organise the sorts of changes that are required. Furthermore, in Extract 7, Emilee's reference to a certain type of object – the scientific articles – as her recommended focus for the discussion with the teachers indeed serves to self-authenticate her as an expert. However, these first extracts also suggest certain hesitation on behalf of the researchers to assume the role of experts on their own; in Extracts 4 and 5, for example, they insist on acting as guides, whose contribution should be that of supporting the teachers to develop their own ideas.

4.2. Ascribing problems and responsibilities to absent others

In the face-to-face encounter with the researchers and the school faculty, it quickly became clear that further interactional work was needed to dialogically build an understanding of the problem at hand, possible actions to be taken, and define the goals of the meeting. The training session began with the different participants introducing themselves. Extract 8, below, starts immediately after these introductions, and begins with one of the researchers (Eva) asking the teachers present to voice their understanding of the problem, and specifically to discuss what needed to be changed and what they expected from the meeting with the researchers. Eva's questions in the first turn – «what can we contribute? what do you expect?» – suggest that despite the a priori attribution of expertise to her and Emilee, the researchers attempt to shift attention away from themselves as experts in order to establish a more collaborative problem-solving environment. In the extracts studied in the rest of this analysis, different teachers are identified: Lucila, Jordi, Ester, Paqui, Sílvia, Maria and Mont. When it was not possible to discern who was speaking from the audio-recordings, they have been given the general label «Teacher».

Extract 8

- 1. Eva: pues jo crec que m'agradaria començar no/ amb- que vosaltres ens expliquéssiu una mica/ (.) com- o sigui què hi penseu que fem aquí/ quina és la situació/ quin és el:/ challenge el problema:/ què què creieu que cal canviar perquè d'alguna cosa suposo que creieu que cal canviar/ perquè si no no estaríem aquí no/ (1.0) què què us podem aportar/ què espereu/ quina reflexió heu fet fins ara/ és a dir/ en quin moment estem/
- 2. Lucila: jo crec que el primer handicap que tenim el més important/ és la quantitat de:/ de mestres que som impartint aquesta area de science\ (.) perquè és que som molts\ i llavors clar nosaltres m::/ no tenim temps real per reunir-nos/ per compartir idees/ per programar/ no tenim\ i llavors clar m: això/ a:: ens (ocasiona) un gran problema jo crec\ i:: (.) i per això estem com una mica perduts perquè és que tampoc no trobem/ no trobem el punt de dir vinga anem a enfocar-lo:/ mm d'aquesta manera\ [no/ (jo crec que-)
- 3. Montse: [clar abans- (.) abans sí que teníem el llibre (.) no/ per lo menos i:/ amb el llibre pues
- 4. Teacher: =fèiem un seguiment del llibre
- Jordi: =fèiem sequíem el llibre i ja està\ però ara com que vam decidir canviar-ho l'any passat i això/ (.) pues és lo que diu la Lucila
- 6. Eva: =vale\
- 7. Ester: cadascú fa una mica el que pot\

Translation of Extract 8

- 1. Eva: well I think that I would like to start right/ with- that you tell us a little/ (.) how- I mean what do you think we are doing here/ what is the situation/ what is the:/ challenge the problem:/ what what do you think needs to be changed because I suppose you think something needs to be changed/ because if not we wouldn't be here right/ (1.0) what what can we contribute to you/ what do you expect/ what reflections have you come up with until now/ I mean/ where are we at/
- 2. Lucila: I think that the first handicap we have the most important/ is the amount of:/ of teachers teaching this area of science\ (.) because there are lots of us\ and so of course we hm::/ we don't have actual time to meet/ to share ideas/ to program/ we don't have it\ and so of course hm: this/ ah:: it (causes) us a big problem I believe\ and:: (.) that's why we're a little lost because the thing is that we don't meet either/ we can't find the point at which to say let's go let's put it hm:/ this way\ [right/ ((I think that-))
- [of course before- (.) before we Montse: did have the book (.) right/ at least and:/ with the book well
- 4. Teacher: =we followed the book

156

5. Jordi: =we did we followed the book and that's it\ but now since we decided to change everything last year and that/ (.) well it's what Lucila says

e-ISSN: 1698-7802

6. Eva: =ok\

7. Ester: everybody does what they can\

The extract is illuminating in terms of how the teachers begin to define the specificities of the problem that the participants have come together to solve. As we can see, the main difficulties identified are not pedagogical, but rather organisational ones. Lucila, the English teacher who was very vocal during the ethnography in voicing her dissatisfaction with *Science*, is explicit in her claim in turn 2 that the real problem of *Science* has to do with the high number of faculty involved in teaching the course and the lack of time to come together to share and to plan. This revelation is interesting in terms of the construction of expertise; it seems paradoxical that careful organisation, over a period of three weeks, had gone into arranging a time and a place for a meeting with the external «experts» to discuss the *Science* subject, while such meetings between teaching peers, according to Lucila, do not take place.

Extract 8 continues, in turns 3, 4 and 5, with Montse, Jordi and a third teacher explaining another factor that seems to be contributing to the problem of teachers' coordination for planning *Science*. This has to do with the fact that in previous years the subject was based on a commercial textbook, which teachers simply followed. The decision had been made, however, to eliminate the textbook – a typical response to the social demand for teaching innovation in our educational context (Maestro, 2002). This move has meant that the little means of coordination that *Science* teachers previously had – the sequencing of contents and activities as set out by the book – has been lost, leading to them to do just «what they can», according to the teacher in turn 7. This «doing what they can» is a euphemism for the problems raised by the teachers and traced in the ethnography, including the lack of joint planning and of consensus about what needs to be taught, when and how.

During the meeting, other factors contributing to the problem of *Science* were mentioned, although the extracts are not reproduced here due to space limitations. These include issues relating to teachers' class schedules and their continuity teaching the subject year after year. They also include the irrelevance and difficulty of some of the specific vocabulary (e.g. parts of the nervous system) that the textbooks introduced, the difficulty of some of the specific contents for the English teachers charged with delivering *Science*, and the fact that the content worked in the *Science* textbooks was sometimes repeated by students in the core *Medi Natural* subject. The latter three factors had contributed to the textbooks being abandoned.

The beginning of the meeting led to quite a pessimistic tone in terms of what could actually be achieved by the people present at the meeting. Indeed, over a period of 22 minutes, a number of challenges and queries of diverse nature were presented to the researchers. In general, the responsibility for the problems at hand and the agency to implement change was largely ascribed to absent others. The resulting feeling of hopelessness is reflected in Extract 9 in the contribution made by one of the researchers (Emilee) when prompted to propose solutions to the large number of identified problems from her position of expertise.

Extract 9

- 1. Emilee: ((laughs)) hi ha molta cosa aquí\
- 2. Teacher: =molta\
- 3. Emilee: =ara bé hi ha cos- hi han coses que::/ que potser són d'ordre didàctic/ (1.5) no/ o sigui/ (.) quin tipus d'activitats/ (.) no/ si fer llibre/ si no fer llibre/ (.) però hi ha altres coses que:/ que marquen tot això no/ de coordinació\ (.) jo trobo difícil parlar de didàctica/ (1.5) no/ (.) si no solucionem els temes de la coordinació/ perquè vau preguntar/ (2.0) què fan a altre::s
- 4. Several teachers: =a altres [escoles\
- 5. Emilee: [altres escoles\ (.) hi ha moltes experiències molt innovadores/ ((coughs)) però totes requereixen/ una coordinació no/

Translation of Extract 9

- 1. Emilee: ((laughs)) there are a lot of things here\
- 2. Teacher: =a lot\

158

- 3. Emilee: =now ok there are thi- there are things that::/ that maybe have to do with teaching methodology/ (1.5) don't they/ so/ (.) what type of activities/ (.) right/ whether to use the book or not to use the book/ (.) but there are other things that:/ that frame all of this aren't there/ of coordination\ (.) I find it difficult to talk about teaching methodology/ (1.5) right/ (.) if we don't solve the problem of coordination/ because you are asking/ (2.0) what do they do at other:/
- 4. Several teachers: =in other [schools\
- [other schools\ (.) there are very (innovative) experiences/ ((coughs)) but they all require/ coordination don't they/

The interaction begins with Emilee expressing slight exacerbation at the number of problems presented to her and Eva to be solved. She continues to authenticate herself as expert throughout the extract, referring, for example, to her knowledge of what other schools do in turns 3 and 5, which teachers had asked her to comment on previously. She also lavs out the conditions for her to be able to offer possible solutions for the problem of Science. In order to talk about teaching methodology (which, as we have seen in her contributions in Extracts 3 and 7 from the email exchange, was what she expected to do in the meeting), the school needs to solve the problem of coordination, an issue raised by the teachers in the meeting and documented extensively in the ethnography. This creates a catch-22 situation, as the participants in the session are not in a position to implement changes at the level of school organisation that would facilitate the time and space for teachers to meet. However, the dilemma raised by the researcher in her «expert» role would also appear to offer the discursive potential of helping participants to further pin down the joint problem space, and specifically to focus on available actions for improving

Science, in order to achieve a constructive outcome to the meeting. In the following section of the analysis, we argue that asymmetries in terms of expertise at play in the interaction are productive ones, supporting progression towards problem-solving outcomes, rather than having constraining effects.

4.3. Resolving a crisis of agency and moving towards problem-solving

Immediately following the researcher's turns in the previous extract, one of the teachers (Ester) offers an alternative take on the problem at hand.

Extract 10

- Ester: clar és que el problema és que no sabíem si fer science/ és a dir/ la nostra pregunta no/ anava més enllà de/ (.) e- cal fer science/ o pot (.) l'àrea dir-se PROJECTS/ i fer projects de/ el que sigui\ o: theatre/ i fer teatre/ o no sé eh/ també ens preguntàvem això/ CAL/ (.) fer science/
- 2. Paqui: és que és que realment/ a nosaltres si ens traguessin la etiqueta de science/ (.) ens farien un favor perquè el que estem/ (.) intentant aconseguir són/ co- són situacions comunicatives/ (.) i el que ens igual és el tema/ però basar-nos només en temes de science/ ens ho dificulta per dir alguna cosa\
- 3. Emilee: i això ho podeu fer/ (.) canviar el nom/
- 4. Paqui: això jo crec que [s'hauria de plantejar/ fa uns anys es va plantejar i ens van dir que no\
- 5. Teacher: [jo crec que sí\
- 6. Sílvia: és que això són coses de direcció este::m
- 7. Paqui: =fa uns anys es va plantejar i van dir que no\ (.) igual ara que estem innovant en TOT/ (.) pues seria [un bon moment pe:r/ (.) per fer una proposta: \
- 8. Ester: [si els hi fem una proposta ben feta:/ no de:/
- 9. Teacher: =fer una [proposta i dir-ho\
- 10. Emilee: [en comptes de science projects

Translation of Extract 10

- Ester: of course the thing is that we don't know whether to do science/ I mean/ our question right/ went further than/ (.) eh- do we have to do science/ or can (.) the subject area be called PROJECTS/ and do projects about/ whatever\ or: theatre/ and do theatre/ or I don't know eh/ we were also wondering about that/ do we HAVE/ (.) to do science/
- 2. Paqui: the thing is that the thing is that really/ if they took the label of science off us/ (.) they would do us a favour because what we are/ (.) trying to achieve are/ co- are communicative situations/ (.) and the theme doesn't matter to us/ but basing ourselves only on themes of science/ makes it difficult for us to put it that way\

Foro de Educación, v. 17, n. 27, julio-diciembre / july-december 2019, pp. 147-165. e-ISSN: 1698-7802

- 3. Emilee: and will you be able to do this/ (.) change the name/
- Paqui: I think that [it should be proposed/ some years ago it was proposed and they said no\
- 5. Teacher: [I think so\
- 6. Sílvia: it's that this is a matter for the directors we a:re
- 7. Paqui: =some years ago it was proposed and they said no\ (.) maybe now that we are innovating in EVERYTHING/(.) well it would be [a good moment to:/(.) to make a proposal: \
- 8. Ester: [if we make a well formulated proposal: right to:/
- 9. Teacher: =make a proposal [and call it\
- 10. Emilee: [instead of science projects

In the first turn of the extract, Ester re-initiates the attempts to specify the problem - one key aspect, as we might recall, of the process of defining a joint problem space - by suggesting that the issue might be the subject itself. The problem is now phrased simply, in the form of a yes/no question: «do we HAVE to do science?». Note that in Ester's question, the researchers' expertise is called into being again through her use of the form of obligation «have to», which must be understood in relation to the researchers' assumed knowledge of cutting-edge foreign language learning scholarship. Ester's intervention in turn 1, however, reveals something else, namely that the teaching staff had actually thought of an alternative for Science (a subject called *Projects*), and that what they were actually seeking was the authentication and validation of their proposal by those externally constituted as «experts» - that is, the researchers. In the following turn, her colleague Paqui aligns with her, in what sounds like the follow-up of Ester's initial argumentation - the beginning of Paqui's turn, translated as "the thing is that the thing is that", clearly constructs this argumentative mode. Pagui's turn continues to reveal that the teachers have a clear understanding of the nature of the problem, being that the label Science limits the possibility of doing the types of communicative language learning activities they would like to implement. The conversation then takes a significant turn, with the focus moving away from the problem itself, to concrete actions that could be taken to solve it. Different teachers, in unison, suggest and agree that a proposal to rename the subject *Projects* could be presented to the school's leadership. There is optimism that the teachers' proposal might be accepted, considering that the school is implementing other changes, and with the teaching of English being of strategic interest. Furthermore, the reduction in the number and length of turns by the researchers in this extract relative to the extracts we have previously analysed suggests a redistribution of the locus of knowledge to the teaching faculty. This is also suggested by the contribution by Emilee in turn 3, which is framed as a question posed to knowing others, rather than as an affirmation, unlike most of her previous contributions.

Following this achievement of consensus in terms of the change of the name of the subject (and implicitly of the methodology, to Project-Based Learning), the focus of much of the ensuing meeting was on strategies that could be used by the teachers to make their proposal a solid one. For example, different teachers described project-based teaching units they have implemented in the past at the school as examples of

experiences upon which they could build in the newly «re-branded» Project subject. Following on from this discussion, another major consensus was then reached, being that not only the methodology, but also the contents of the subject needed to be clear for each grade level, so that it could be successfully implemented regardless of the teachers who were eventually assigned to it each year. This consensus is reflected in Extract 11.

Extract 11

- 1. Jordi: vull dir que nosaltres sí que ho tenim clar/ cap a on ho volem enfocar/ o cap a on ho volíem fer/ més o menys/ tipu aixís/ però clar lo que diu la Maria/ si:: estem aquí n'hi ha dos que sí que ho faran i:: la resta no/
- 2. Ester: =també em sap greu per la-
- 3. Jordi: =tampoc vull di::r/ (.) per molt que decidim/ al mes de juny no/ o sigui com a tard o (.) ja no caldrà/ (.) que els dos que queden/
- 4. Sílvia: =bueno però poden haver unes directrius [establertes/ som nosaltres els que ho hem vist i independent qui ho faci/ sigui en pepito/ o el fulanito/
- 5. Eva: [sí:/ exacte:/ exacte sí: \
- 6. Sílvia: =jo crec que ha d'anar per aquí no/
- 7. Eva: bueno és que això és part del que tu deies no/ és a dir/ no ha de dependre tant de les persones jo crec no/ [és una mica el que deia la Sílvia també/ (.) hi ha d'haver una manera de fer/ que sigui independent una mica de qui ho acabi fent no/
- 8. Sílvia: [dir ja està\ hem vist/ aquesta realitat nosaltres ARA/ nosaltres proposem/ una línea
- 9. Eva: =exacte\ (4.0)
- 10. Eva: llavors bueno/ una de les maneres no/ el què us deia/ pensar per cicles/ pensar en la producció/ o sigui què volem aconseguir al final no/ [several lines omitted]
- 11. Eva: =sis projectes que [tinguessin una certa coherència entre ells no/
- ſsí\
- 13. Eva: =i una certa evolució en quant [a: què [demanem que faci els estudiants/ ſsí\
- 14. Mont:
- 15. Mont: [clar que no es repete::ixen [al segon cicle/ (.) que no es repeteixin\ sinó els nens també:/
- 16. Eva: [exac
 - te\(.) exacte\ exacte\(.) exacte\
- 17. Ester: bueno com el que hem fet a medi no/ una mica/
- 18. Teacher: això ho hem fet aguest any\

Translation of Extract 11

1. Jordi: I mean to say that if we are clear about it/ towards where we want to focus/ or towards where we'd want to do more or less/ like this/ but of

- course like Maria says/ if:: we are here there are two that will do it and:: the rest won't/
- 2. Ester: =I also feel sorry for-
- 3. Jordi: =I don't mean::/ even if we decide/ in the month of June right/ at the latest or (.) it won't be necessary/ (.) and the two left/
- 4. Sílvia: well but there can be some guidelines [established/ as we have seen it and independent of how whether it's one person/ or another/
- 5. Eva: [yes:/ exactly:/ exactly yes: \
- 6. Sílvia: =I think we have to go in this direction right/
- 7. Eva: well this is part of what you were saying right/ I mean/ it doesn't have to depend so much on the person I think right/ [it's sort of what Sílvia was saying too/ (.) there has to be a way of doing/ that's a little independent of who does it in the end right/(.)
- 8. Sílvia: [to say ok\ we've seen/ this reality ourselves NOW/ and we propose/ a line
- 9. Eva: =exactly\ (4.0)
- 10. Eva: then well/ one of the ways right/ what I was saying before/ think in terms of key stages/ think about production/ so what do we want to achieve in the end right/ [several lines omitted]
- 11. Eva: =six projects that [had certain coherence among them right/
- 12. Jordi: [yes\
- 13. Eva: =and certain evolution in terms [of: what [we ask the students to do/
- 14. Mont: [yes\
- 15. Mont: [of course that it's not repea::ted [in the second stage/ (.) that it's not repeated\ if not the students also:/
- 16. Eva: [exactly\ (.) exactly\ exactly\ (.) exactly\
- 17. Ester: well like we've done in core science (Medi) right/ a little/
- 18. Teacher: we did that this year

At the start of the extract, in turns 1-3, one of the teachers, Jordi, introduces an obstacle to keep in mind when formulating the proposal for the subject, being that most of the teachers attending the meeting will not be assigned to teach the subject in future years. The obstacle is rejected by Sílvia, in turn 4, arguing that despite this factor, certain guidelines can be agreed on, which teachers should then adhere to. This idea is vehemently aligned to by one of the researchers, Eva, who voices an explicit evaluation of the suggestion in turn 5 – «yes, exactly, exactly, yes» – as well as less directly by other teachers. Eva, in fact, produces a contiguous turn (7) that rephrases the same idea put forward by Sílvia. This is an important move, not only because it validates Sílvia's proposal, but because it reinforces the line of thinking and acting initiated by Ester and Paqui in Extract 10. In this new scenario, the definition and organisation of the new Projects subject should be in the hands of those present and not in the hands of some absent others, which was the initial ethos of the encounter. Additionally, in Sílvia's key turn, the teachers constitute themselves

as agents of change and as an empowered collectivity against the individualistic framing to which Jordi seems to be reverting in turn 1. The long pause after turn 9 indicates that a consensus on how to proceed seems to have been reached. In turns 10, 11 and 13, Eva re-introduces an "expert" suggestion that she had made previously in the session and observed in the fieldwork, being that when setting out the guidelines for the subject, the teachers should work to distribute contents and objectives across the key educational stages (cycles), in order to avoid the problem of repetitions. Interestingly, the teacher who had focused on the obstacle of changing teachers at the beginning of the extract aligns verbally with Eva's suggestion in turn 12, as do several of his peers.

Most significantly, at the end of the extract, some of the teachers claim that the approach suggested by the researcher has already been taken in another subject. Thus, the idea introduced by Eva is not only feasible, but has actually already been implemented by the teachers elsewhere. The teachers therefore are able to authenticate themselves as knowledgeable and experienced professionals equipped to implement the changes agreed on at the meeting.

5. Conclusions

The analysis presented in this article has traced how the ambiguous problem of *Science* was collaboratively pinned down across time and space, from the initial email exchanges prior to a "giving back" meeting, to the meeting itself. It has also paid attention to how expertise was enacted throughout the process, and the consequences of such enactments for achieving a positive outcome to the meeting.

The data has revealed how through a dialogical process, and after an initial cathartic stage in which the teachers were allowed to voice their multiple sources of discomfort with different aspects of their teaching or of school organisation, a joint problem space was created, that included a more specific definition of the issue at hand on behalf of the participants, as well as a more complete understanding of concrete actions that could be taken. Thus, while significant problems such as the teachers lacking time to collaborate, among others, were not able to be resolved in the meeting, the participants dialogically manoeuvred the conversation to a space in which they deployed agency to propose and to implement changes. These included modifying the name of the subject to better represent their teaching aspirations, and setting out a basic framework for how the subject should be taught.

In reaching such consensuses, we have argued that there indeed existed some a priori hierarchies of expertise, organised across institutional boundaries (i.e. the researchers' affiliation to the university), that legitimised and afforded worth to the contributions of the researchers. However, we have also shown how these relations operated initially as productive ones, prompting the problem-solving meeting to move beyond a crisis of non-ownership of responsibilities, towards the teachers' assumption of agency and constructive outcomes. We have also argued that the researchers demonstrated in their contributions to the interaction their hesitance to walk alone in the role of "expert", by validating the teachers' own knowledge and experience in relation to the problem at hand and encouraging them to reach consensus and seek solutions that drew on their collective expertise. The analysis

further shows how the researchers were initially hesitant to be positioned as experts, and then progressively stepped back from this role as the meeting progressed by reducing their turns at talk and working to validate those of the teachers.

We believe we managed to «give back» in a way that was not only collaborative and meaningful for the participants, but that began to address some of the organisational issues we had identified at the school. Our intervention had transformative potential in that, beyond the specific problem of Science, we tried to encourage teachers to see themselves as a resourceful collectivity with the expertise needed to identify areas in need of improvement and to devise and implement new teaching initiatives. The changing key of the session, from pessimistic helplessness to excitement and anticipation, indicates that the teachers somehow felt they were jointly taking the reigns of their own teaching futures. We felt we planted the seeds for a new, more collaborative and bottom-up organisational culture. Only the future will reveal whether we were successful.

6. References

164

- Andersen, C., & O'Brien, J.M. (2017). Sources and methods in indigenous studies. Abingdon, Oxon: Routledge.
- Cameron, D., Frazer, E., Harvey, P., Rampton, B., & Richardson, M. (1992). Researching language: Issues of power and method. London: Routledge.
- Gupta, C., & Kelly, A.B. (2014). The social relations of fieldwork: Giving back in a research setting. Journal of Research Practice, 10(2), 1-11.
- Hatch, J.A. (2002.) Doing qualitative research in education settings. New York: State University of New York Press.
- Hutchins, E. (1995). Cognition in the wild. Cambridge, M.A.: MIT Press.
- Maestro, P. (2002). Libros Escolares y Currículum: Del reinado de los libros de texto a las nuevas alternativas del texto escolar. Revista de Teoría y Didáctica de las Ciencias Sociales, 7, 25-52.
- Martin-Jones, M., & Martin, D. (Eds.). (2017). Researching Multilingualism: Critical and Ethnographic Perspectives. London: Routledge.
- Ploettner, J. (2019). Professional development and the interactional accomplishment of emi expertise. (Unpublished PhD dissertation). Universitat Autònoma de Barcelona, Bellaterra,
- Roschelle, J., & Teasley, S.D. (1995). The construction of shared knowledge in collaborative problem solving. In O'Malley, C. (Ed.), Computer supported collaborative learning (pp. 69-97). Berlin: Springer-Verlag.

Foro de Educación, v. 17, n. 27, julio-diciembre / july-december 2019, pp. 147-165. e-ISSN: 1698-7802

- Sarramiento-Klapper, J.W. (2009). The sequential co-construction of the joint problem space. In Stahl, G. (Ed.), *Studying virtual math teams* (pp. 83-98). New York: Springer.
- Summerson Carr, E. (2010). Enactments of expertise. *Annual Review of Anthropology,* 39, 17-32.
- Teasley, S.D., & Roschelle, J. (1993). Constructing a joint problem space: The computer as a tool for sharing knowledge. In Lajoie, S. P., & Derry, S. J. (Eds.), *Computers as cognitive tools* (pp. 229-258). Mahwah, NJ: Lawrence Erlbaum Associates.
- Van der A.J., & Blommaert, J. (2017). Ethnographic monitoring and the study of complexity. In Martin-Jones, M., & Martin, D. (Eds.), *Researching Multilingualism: Critical and Ethnographic Perspectives* (pp. 259-271). London: Routledge.

