

Beliefs and Tensions of Kindergarten Pre Service Students: a Three Case Longitudinal Study

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Abstract

This present work is part of a four-year-project related to the pre service teachers' beliefs' about initial literacy from the University of Barcelona. In particular, this paper presents the evolution of beliefs and tensions from the first to the second year of training from three pre service kindergarten students. The final aim of the project is to make proposals in order to improve teacher education. So far, it can be confirmed that beliefs are resistant to change but not immovable. Some core beliefs have been identified and they have incorporated new information acquired during the second year of training, specifically, from the practice. Furthermore, tensions and the awareness (or not) of them have become a very important issue since they show conflictive areas to work with students in order to make them conscious of their thoughts. In conclusion, beliefs and tensions appear to be the quid of the question in teacher education.

Keywords

Beliefs; tensions; pre service students; initial literacy; teacher training



1. Introduction

Initial literacy is one of the most important learning to be achieved in a literate society. Thus teachers' education regarding this complex learning is extremely relevant because an important part of the knowledge takes place during school time. Therefore, researchers should address their effort and interest to have a better understanding of what happens in those years. This was the starting point of the present paper, which is part of a larger longitudinal study. In particular, the questions guiding this paper are related with how do teacher thoughts' evolve (if they do) during teacher education.

Lortie (1975), back in the seventies, made an accurate explanation of the teachers' socialization, trying to identify different non-traditional contexts where teachers learn how to deal with the teaching profession. This would explain why some teacher practices are perpetuated even though there are new approaches and new ways of teaching taught in pre service education and continuing education. Basically, the apprenticeship of observation makes emphasis on the extended period of time all the students are exposed to as a consequence of the formal schooling. Thereby, all the pre service teachers arrive to teacher education programs with a large experience as observers that may filter the new information acquired in the degree. Besides, in a long-term view, this would be one of the reasons that would explain the perpetuation of the educational system in general. Chong, Wong & Queck (2005) pointed out that the main reason to explain this perpetuation of the educational system relies on the lack of belief exploration in teacher training programs. However, it cannot be forgotten one of the most important characteristics of the beliefs system, the resistance to change noted by Pajares (1992) and more recently by Peacock (2001).

There can be found many studies working with teachers' beliefs. Studies with either pre service teachers and/or with in service teacher beliefs, as well as investigations that conclude that change in beliefs systems have occurred (or not). For the topic on the current paper, those most interesting studies are those who put the emphasis on whether

there has been change or not in the beliefs systems during teacher education programs. Basically, those studies can be divided into two groups, those that confirm that after the course no changes are stated such as Kagan (1992) or Peacock (2001) and those that confirm belief change (Nettle 1998; Matheoudakis 2007). In relation to the same Faculty Teacher Training from the University of Barcelona, Cambra (2008) conducted a research were concluded that the degree didn't had enough impact on students' beliefs. Nonetheless, all the authors agree that teacher education programs should take students beliefs as the starting point (Graden 1996; Cambra 2000; Borg 2003).

In order to measure the impact of the course the model used is based on Woods (1996) proposal of beliefs, assumptions and knowledge (BAK). The model used in this paper is one of the several revisions made of the system. In particular, Cambra's (2000) proposal has ben used because it offers a wider vision of the second term, assumptions, including the French approach of representations (Jodelet 1994). Therefore, the system used is compounded by beliefs, representations and knowledge (BRK). Despite the use of this compounded system – with the presence of three different elements - there will be no attempt to differentiate between what is belief, what is a representation or what is knowledge because they are intrinsically bounded and it is almost impossible to draw the borders between them. The BRK system is used as a synonym of beliefs, but the preference to talk in terms of a compounded system is because it visualizes the complexity of the teachers' thoughts.

Another extremely relevant issue when talking about pre service teachers and their BKR systems is tensions. Traditionally, this term has been used to talk about the differences between beliefs and actions even though other authors suggested concepts such as incongruences (Graden 1996) or mismatches (Lee 2008). Phipps & Borg (2009) alert that these differences have been perceived as something negative and they suggest the use of the term tension, a more positive perspective. This term is based in Freeman (1993: 488) study where he defined tension as “divergences among different forces or elements in the

teacher's understanding of the school context, the subject matter or the students". Borg (2011) used this broader positive understanding of the term to talk about further differences than just thoughts and practice or beliefs and action. Specifically, he used this term to talk about the tension between two perceptions; the perception of belief change and the real belief change experienced by one of the participants of his investigation. Along these lines, Pérez-Peitx (2013) identified tensions between the actions and the beliefs but also in the same discourse. This new tensions showed areas where the participants kept different points of view depending on the moment of the interview. This broader vision of tension is the one being used in this study, because it makes emphasis on the potential contribution of tensions, like Johnson defended (1994), and shows areas where teacher education programs can improve.

Therefore, the questions guiding this paper are: do teachers' beliefs change between the first and the second year of teacher education in relation to learning to read and write? And also, are there any tensions in the students' interviews? If the answer is yes, which are they?

2. Data Collection and methodology

As it has been said, this paper is part of a four-year qualitative longitudinal study. The original study also works with pre service primary teachers beliefs and with other data than interviews, but for this paper some samples have been selected. For the designing of the project Borg (2003) and Richards (2009) demand for longitudinal qualitative studies was taken into account study, because it makes emphasis on the potential contribution of tensions, like Johnson defended (1994), and shows areas where teacher education programs can improve.

Data is collected through interviews as suggested by Barcelos (2003) as one of the best ways of obtaining qualitative data, concretely, with an oriented talk (Palou & Fons 2013). This type of talk allows the interviewer to raise new issues for discussion as they appear

as an interesting topic in the conversation and also gives space to the interviewees to make their contributions. All the interviews were collected and transcribed by one of the researchers. The length of the interviews depends on each subject but the first interviews lasted around 13 minutes while the second ones were about 30 minutes -with an exception of 75 minutes-. Participants began the degree on September 2011 and they are supposed to finish it on June 2015. The interviews were collected at the end of the first course (academic year 2011-2012) and at the end of the second (academic year 2012-2013). At the end of the second course (April and May of 2012), they coursed a practice subject, which consists of attending two schools (one month in each one) study, because it makes emphasis on the potential contribution of tensions, like Johnson defended (1994), and shows areas where teacher education programs can improve.

Data is analyzed with an ethnographic-interpretative approach, always insisting in the holistic perspective that allows the researchers to infer beliefs and make emerge the tensions from the discourse. In order to achieve this goal, data is analyzed taking Kerbrat-Orechioni (2005) model of interactionist conversational analysis as the base. The original model includes three dimensions to analyze, the interlocutive, the thematic and the declarative. Because of the nature of the data, an interview, the interlocutive dimension is not as relevant as the other two because it focuses on whom is talking or with whom are people interacting. Whereas the other two dimensions (thematic and declarative) center the attention on what is being said and how is it being said.

3. Participants

All the subjects are studying the kindergarten teacher degree (Grau de Mestre en Educació Infantil) in the University of Barcelona (Barcelona, Spain).

- Carolina is a 27 year-old student with a terrible initial literacy experience. Her first interview is impregnated with these bad memories that she uses to explain her point of view. In her second interview, this experience is less obvious because

she makes continuous explicit reference to the “practice subject” she recently attended, and she uses this new available experience to justify her point of view.

- Sara is a 23 year-old student with the capacity to think in scenarios different from those experienced in her practice subject. She expects to change her point of view about initial literacy during the teacher-training program.
- Diana is a 24 year-old student. She believes in what they say to her, without reflecting if it is true or not. As a consequence of this feature she has propensity to have tensions in those issues she has not reflected.

4. Results

For each of the three students two tables will be presented. The first one reflects the evolution of some of the inferred beliefs (there are many for every case) and the second one refers to the tensions identified during interview analysis. More tensions are expected in the second data collection because the interviews were more extensive and the topics where more deep but also because the students are in the second year of the degree and they have more knowledge related to initial literacy.

1.1. Caroline

Figure 1: Comparison of beliefs inferred from the analysis of Carolina’s interviews.

Beliefs inferred from the first interview	Beliefs inferred from the second interview
1. There is too much pressure on the school regarding the learning to read and write ¹	1. There is too much pressure on the school regarding the learning to read and write <ul style="list-style-type: none"> - The society puts pressure on the school, the school puts the pressure on teachers and those to the children - The origin of the pressure is the fear of the adults - The problem is between the rhythm the children needs and the one imposed

¹ The formulation of beliefs may be bizarre but they are almost literally translated either from Catalan or Spanish in order to maintain the same meaning

2. In order to learn to read and write, time and space must be given	2. In order to learn to read and write, time and space must be given - Teachers must trust children - When the children are not pressured they have more capacity - Part of the learning is leaving the children do all the process by their own
3. Orthographic errors are not important in P4.	3. In P4 ² , is more important the message than how it is written
4. For a good learning the child must show interest for initial literacy	4. For a good learning the child must show interest for initial literacy, and he will because we live in a literacy context
5. A multicultural and multilingual classroom means more work for the teacher	5. The teacher has the key of the success of a multicultural and multilingual classroom.

It can be confirmed the existence of change in Carolina's beliefs, even though the core remains almost the same. Two types of change can be differentiated. On one hand, there are beliefs that have incorporated new information to the previous existent core belief such as beliefs number 1, 2 and 4. In the first example the new information acquired is about the origin of the social pressure, what agents are implied and finally, Carolina has identified a tension in the educational system, which would explain the inception of this social pressure. In the second example, beliefs are about the conditions of the learning (when she talks about teachers trust) or the consequence when she formulates the belief in a different way (how does this learning happen when there is no pressure). Finally, she adds new information about the usefulness of letting time and space when she talks about the importance the children being the main actors of the process. On the other hand, there are beliefs that have been reformulated, for example number 3 or 5, maintaining part of the core belief, but with significance alterations. In the example number 3 the change of perspective is quite illustrative. The belief has moved from a specific situation (orthographic errors) to a wider conception of the learning process where the inferred belief is that the message is more important than the form. At last, example number 5 shows again a change of perspective from the specific anecdote (more work for the teacher) to the identification of the key of the success.

² P4 means "parvulari" (kindergarten) "4 years"

Figure 2: Tensions identified in Carolina’s interviews

Tensions from the first interview	Tensions from the second interview
A. Learning to read and write is a complex simultaneous process vs learning to read and write has a well established hierarchy process	-
-	B. There is a tension in the educational system between children learning rhythms vs social pressure to learn to read and write
-	C. The children have to make the whole process vs the teacher makes parts of the process
-	D. The pedagogical advantages of group work vs use group work to have all the students under control

In her first interview, Cristina expressed a tension associated with the nature of the learning (A), whether it is more free or there is a particular order to be followed. In her second interview, inferred beliefs indicate that she is more supportive of the idea that learning to read and write is a complex and simultaneous process. So, even though it doesn’t appear in the figure 2 - because it is no longer a tension in her second interview-, the tension has evolved and has been solve, at least temporarily. Also, other tensions appeared. In particular, Carolina identified a tension in the educational system (B). Although this tension is outside her belief system - because is information related to a specific situation or reality-. Also, during her interview some tensions between her beliefs and her practice have arose. In particular, those tensions are between her belief system, as said, and the account of her practice subject done in the interview. Basically, they are narrated actions from the practice subject not matching the correspondent beliefs (C, D).

1.2. Sara

Figure 3: Comparison of beliefs inferred from the analysis of Sara’s interviews.

Beliefs inferred from the first interview	Beliefs inferred from the second interview
1. Knowing to read is more important than knowing to write	1. Knowing to read is more important than knowing to write
2. The sooner the children know t read and write the better	2. The sooner the children know to read and write the better
3. Teacher’s role is the most important thing in a multicultural classroom	3. Multicultural classrooms are more difficult (compared with a non multicultural) because the teacher doesn’t

	know all the languages
4. Multiculturalism is a rich situation for the children	4. The languages that children bring to multilingual classrooms will have an impact on their future learning (possibility or not of making transferences)
5. -	5. The system is the same as when she as a scholar

In Sara's case, other type of belief change can be identified. On one side, two beliefs (number 1 and 2) have emerged the same way on both interviews, which indicates that they haven't been altered at the moment of the second interview. On the other side, there is one belief (number 5) that has been inferred in the second interview but not in the first one. The other two beliefs (number 3 and 4) are reformulations referred to multiculturalism. They are specifically interesting because her practice experience was in a multicultural classroom. Again, there has been a shift of perspective but just the opposite way than in Carolina's analysis. Sara's beliefs have shift from a general perspective of the situation -the importance of the teacher's role in the class- towards a more detailed dimension of the reality -the added difficulty of not understanding all the languages that children bring to the classroom. So, it can be said that she places the she places the challenge of multicultural classrooms in the communicative competence.

Figure 4: Tensions identified in Sara's interviews

Tensions from the first interview	Tensions from the second interview
-	A. About a specific activity: first she defines it in terms of boring and impossible activity and then she says she liked it and that it was a useful activity.
-	B. What I expected to find in the classrooms vs what she really found in the classrooms

During the first interview, Sara didn't express any idea that indicates any tension in her belief system. However, in her second interview, Sara expresses two opposite opinions about a specific activity (A) done in the class when she was attending the practice subject and shows signs of being aware of the situation. In particular, she literally says "well, it

may seem not but" which includes this double opinion of the activity. More relevant is the tension between what she expected to find in this practice experience and what she really found (B). She is shocked because the system has not changed in more than fifteen years and she lives this lack of change as something negative.

1.3. Diana

Figure 5: Comparison of beliefs inferred from the analysis of Diana's interviews.

Beliefs inferred from the first interview	Beliefs inferred from the second interview
1. You have always to cheer up the children	1. You have always to cheer up the children
2. Initial literacy and calculus are the most important things to be taught	2. -
3. Multilingualism is a good thing because knowing more languages means major future mobility.	3. -
4. -	4. Reading and writing well in P5 is a good thing
5. -	5. When you work oral skills you are also learning to read and write

Diana maintains exactly the same belief (number 1) in the first and second interview, which indicates lack of change. Basically, in figure number 5 it can be see how some of the beliefs didn't emerge in both in the interviews. Is the case of belief number 2 and 3, that emerged in the first but not in the second interview, and the case of beliefs number 4 and 5, which appear in the second but not in the first interview.

Figure 6: Tensions identified in Diana's interviews.

Tensions from the first interview	Tensions from the second interview
-	A. About correction: you have to correct children's writings vs you don't have to correct them
-	B. How can you measure a good level of English: decoding vs understanding
-	C. Learning to read and write: the sooner the better vs there is a perfect moment to initiate this learning
-	D. What is project work

In the first interview no tensions emerged. However, in the second interview several tensions appeared, basically related to conceptual issues such as –i.e. what is (or not) project work (D), what defines a good level in literacy (B)- but also there were ideas been expressed in almost contradictory ways such as example (A) about whether you have to correct or not children's errors in a composition or if it is true that the sooner you learn to read and write the better (C). Furthermore Diana is not aware of any of her tensions. Therefore, they indicate a gap in the belief system that teacher training should fill offering a wide variety of paradigms, theories, models, etc to assist reflection in order to solve those tensions.

5. Discussion

This study presents several limitations that have to be taken into account. First of all, it is part of a larger study not concluded, so it will be interesting to see if the final conclusions go in the same direction as the ones exposed here. For sure, it will complete these results, since they will offer a wider vision of the learning process in teacher education programs. Second, this is a case study with three subjects. This means that there is no attempt to generalize these conclusions to all the students in all pre service educational programs. Finally, and not least, the way data was obtained has unquestionably an impact on the deepness of the inferred beliefs. This qualitative study is very different than quantitative studies, even though the topic may be the same.

With this data it cannot be assured that beliefs are immovable. It can be demonstrated that some of the beliefs remain perfectly stable through the year of teacher education, which would confirm the stability noted by Pajares (1992). Furthermore, both three subjects kept, at least, one of the beliefs stable between the interviews. But, at the same time, some beliefs have changed. The interesting part is to see how these beliefs have changed, whether some new information has been acquired to the previous existent structure or if it has been reformulated in order to express the idea in a entire different way. Nevertheless, the amount of change can be so small, that it can be unperceived with some data

collection instruments. In the present paper, in-depth interviews have been made and the exhaustive discursive analysis has proved to state changes. This may be one of the most importance difference between the current study and the one reported by Peacock (2001), were he used a questioner called Beliefs About Language Learning Inventory (BALLI) to obtain data. The impact of the one-year degree is low, but to agree with Cambra (2008) the investigation should be terminated, because there is still one last interview in the final course of the degree. Clearly, what this data shows is the existence of previous shaped beliefs, acquired before teacher education, what confirms Lortie's (1975) theory about the impact of the formal schooling configuring teachers' beliefs.

Another relevant issue is the appearance (or not) of the same topic beliefs, which complicates the beliefs tracking. It is especially characteristic in Diana's case, where most of the beliefs that appeared in the first interview didn't appear in the second, and the same way around. This be caused by the dynamic condition of beliefs (Dufva 2003) and also because it is impossible to infer the complete belief system of each student from one interview. Beliefs are also being constructed when interacting and not all the issues may arise in one interview, which means that some of the beliefs may keep submerged.

For these reasons teacher-training programs should take beliefs systems as the starting point (Graden 1996; Cambra 2000; Borg 2003; Chong, Wong & Queck 2005). It would make a difference to work individually with students in order to see what beliefs are they bringing in to the classroom. If that is not possible, at least a belief exploration should be done at the beginning and at the end of every course to see the impact of the program. Also, tensions appear to be the key factor because they show conflictive areas where students are no comfortable yet, because they lack either reflection or more theory to incorporate to their thoughts. In this sense, self-reflection or auto exploration should be encouraged because tensions, as well as beliefs, will accompany them for life and it can be useful to make our students aware of their thoughts. Thereby, looking at discursive

tensions as positive elements (Johnson 1994) can make the difference both for teachers and students, and certainly for the researchers.

6. Conclusions

The methods used in this investigation to obtain data and to analyze it have proved to be appropriate for achieving the objectives described in the introduction. The way beliefs have been inferred shows an interesting approach to study this non-visible part of learning-to-be-a-teacher process that takes place in students' minds. Moreover, it has demonstrated to be able to show the evolution of the beliefs as well as tensions, which was the main objective, but also it has brought deepness and an intensity that grants a better understanding of the complicated learning process.

Furthermore, it has been confirmed the existence of change and stability in students' beliefs at the same time. This fact changes the narrow vision of what happens during teacher education, whether only change or the absence of change can be deduced. It shifts the understanding of the process towards a much wider, complex and pluralistic perception where some of the beliefs change while some don't. These conclusions stimulate the researchers to keep investigating teachers' beliefs, and specially trying to identify the reasons of shift.

7. References

- Barcelos, A.M.F. (2003). Researching beliefs about SLA: A critical review. In A. M. Barcelos & Kalaja, P. (eds.), *New approaches to research on beliefs about SLA* (pp. 7-33) Dordrecht: Kluwer.
- Borg, S. (2003). Teacher cognition in Language teaching. A review of research on what teachers think, know, believe, and do. *Language Teaching* 36, 81-109.
- Borg, S. (2011). The impact of in-service teacher education on Language teachers' beliefs, *System*, 39: 370-380.

Cambra, M. (2000). El pensament del professor: formació per a la pràctica reflexiva. In A. Camps & Ríos, I. & Cambra, M. (eds.), *Recerca i formació en didàctica de la llengua* (pp. 161-172). Barcelona: Graó.

Cambra, M. (2008). Enseigner l'oral à l'école primaire. Les représentations des futurs enseignants catalans en stage dans des classes de Français langue étrangère. In C. Cortier & Bouchard, R. (eds.), *Quel oral enseigner, cinquante ans après Le Français Fondamental? Le Français dans le Monde. Recherches et Applications* (pp. 158-170). Paris: CLE International

Chong, S. & Wong, I. Y-F & Quek, C.L. (2005). Pre-Service Teacher's Beliefs, Attitudes, and Expectations: A Review of the Literature. Centre for Research in Pedagogy and Practice International Conference on Education, Singapore. Retrieved 28 August, 2012. <http://conference.nie.edu.sg/paper/covert/ab00613.pdf>

Dufva, H. (2003). Beliefs in dialogue: Bakhtinian view. In A. M. Barcelos & Kalaja, P. (eds.), *New approaches to research on beliefs about SLA* (pp. 136-146)) Dordrecht: Kluwer.

Freeman, D. (1993). Renaming experience/reconstructiong practice: developing new understandings of teaching, *Teaching and Teacher Education*, 9 (576): 485-497.

Graden, E.C. (1996). How Language Teachers' Beliefs ABOUT Reading Instructuin Are Mediated by Their Beliefs About Students, *Foreign Language Annals*, 29 (3): 387-395.

Jodelet, D. (ed) (1994): *Les représentations sociales*. Paris: PUF.

Johnson, S.E. (1994). The emerging beliefs and instructional practices of preservice English as a second language teachers. *Teaching & Teacher Education*, 10 (4), 439-452.

Kagan, D. M. (1992). Professional growth among preservice teacher education. *Review of Educational Research* 62, 129-169.

Kerbrat- Orecchioni, C. (2005). *Le discours en interaction*. Paris: Armand Colin.

Lee, I. (2008). Ten mismatches between teachers' beliefs and written feedback practice, *ELT Journal*, 63 (1): 13-22.

Lortie, D. (1975). *Schoolteacher: A sociological Study*. Chicago: University of Chicago Press.

Mattheoudakis, M. (2007). Tracking changes in pre-service EFL teachers beliefs in Greece: A longitudinal study, *Teaching and Teacher Education*, 23: 1272-1288.

Nettle, E. B. (1998). Stability and change in the beliefs of Student teachers during practice teaching, *Teaching and Teacher Education*, 14(2): 193-204.

Pajares, M. F. (1992). Teachers' beliefs and educational research: cleaning up a messy construct, *Review of Educational Research*, 62 (3) : 307-332.

Palou, J.; Fons, M. (2013). Investigar en un escenario social denominado aula, *Cultura & Educación* 25 (4). DOI: 10.1174/113564013808906816

Peacock, M. (2001). Pre-service ESL teachers' beliefs about second Language learning: a longitudinal study. *System* 29, 177-195.

Pérez-Peitx, M. (2013). Els perfils de pràctiques docents i el sistema de creences: un estudi de cas de dues mestres de parvulari. *Bellaterra Journal of Teaching & Learning Language & Literature*, 6 (1), 56-71.

Phipps, S.; S. Borg (2009). Exploring tensions between teachers' grammar teaching beliefs and practices. *System*, 37 (3): 380-390.

Richards, K. (2009). Trends in qualitative research in Language teaching since 2000, *Language Teaching* 42/2, 147-180.

Woods, D. (1996). *Teacher cognition in Language teaching: Beliefs, decision-making and classroom practice*. Cambridge: Cambridge University Press.