Rethinking Apprenticeship in Pre-Service Teachers' Training

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Abstract

The apprenticeship has a crucial role in many teachers' training programs, nevertheless some scholars have underlined that in many cases the apprenticeship's experiences don't realize their full potential. Indeed the apprenticeship does not have a positive impact on the professional development of the pre-service teachers by default, but, in order to reach this goal, it must be carefully designed. Moreover, in order to transform the apprenticeship in a significant moment, it is essential to encourage pre-service teachers to consider it through reflective thinking. As a matter of fact, reflective thinking allows them to elicit the knowledge arisen from experiences through a critical and systematic analysis. According to this view, the Master's Degree in Primary Teacher Education at University of Verona reforms the pre-service teachers' apprenticeship in the perspective of Community Service Learning, an educational approach that integrates community service and intentional learning activities. Applied to the pre-service teachers' training, Community Service Learning sets up a service action that connects pre-service teachers with in-service teachers enabling the first ones to strengthen their training curriculum through an experiential path, to develop a sense of civic responsibility towards their community and to encourage the reflective sharing of their own experiences.

Keywords: Apprenticeship, Pre-service teachers, Experiential learning, Community Service Learning

1 Learning how to teach

1.1 The apprenticeship in pre-service teachers' learning

The apprenticeship starts to become part of the teachers' training since the 1980s and it has assumed an increasingly central role in the pre-service teachers' education across the world. However, some recent studies interline that, despite their significant impact on professional training, apprenticeship's experiences have not yet reached their full potential improving impact (Hobson et al., 2009; Hobson, & Malderez, 2013).Many are the aspects that negatively influence the potential of this formative tool: the lack of sufficient time for mentoring, the lack of rigour in mentors' selection, the insufficient opportunities for effective mentors' training, the widespread practice to judge mentoring as an obstacle for the development of reflection in practices and to consider negative its influence in pre-service teachers' training (Hobson, & Malderez, 2013).

According to these considerations, it emerges that to realize the full potential of apprenticeship in pre-service teachers' learning it is essential to re-design these programs in order to support both pre-service and in-service teachers. Indeed, if practice experience in teachers' education improves teachers' «capacity to develop expertise on the basis of experience» (Reid, 2011, p. 308) it also clears that this could not happen under any condition and that it is necessary to carefully design the program that implements apprenticeship in pre-service teachers' learning. Nevertheless, this is not an easy task as «the culture of teaching is not homogeneous», or, to say it in other words, in different countries and often also in the same country but in different teachers' training programs, there are different visions of the meaning in making practice experience as a crucial part of teachers' education (Lampert, 2010, p. 29). Indeed, if the diversification in perspectives that involve teachers' training on one side guarantees the richness of comparison, on the other side it makes difficult to start a global process of reforming teachers' education (Sykes, Bird, & Kennedy, 2010).

Some programs, particularly in the United States of America, save a full-year, often the lastone, for apprenticeship, which becomes a kind of scaffolded entry into teaching. This idea of apprenticeship involves a participatory vision in which pre-service and in-service teachers actively cooperate during teaching moments giving at the same time specific planning and teaching responsibilities to pre-service teachers. This kind of approach has indubitably the merit of giving value to the learning potential of concrete experiences and, at the same time, of devoting an extended time to apprenticeship, but it also has some weaknesses. Firstly, people who assume the role of mentors are in-service teachers, while the academic staff has mainly supervising duties, and this undermines the possible rich contribution of the research dimension to apprenticeships. At the same time it is a hazardous choice because in-service teachers, who often have not been properly trained to handle apprenticeship as mentors, could not have all the competences needed to handle with conflicts and tensions that may emerge. Therefore, they could perceive the presence of the pre-service teacher as an additional obstacle in their educational context (Feiman-Nemser, 2001, Rozelle & Wilson, 2012; Scherff & Singer, 2012).

Other programs use the model of cognitive apprenticeship: this perspective was developed in 1989 by Allan Collins, and his collaborators and it comes from the trade apprenticeship. It implies that an expert (in-service teacher) and a novice (pre-service teacher) work cooperatively in order to complete a task, reserving time to express the cognitive processes that are at the basis of their actions. The novice develops cognitive skills through the participation in an authentic learning experience helped by some specific methods that support the goals of cognitive apprenticeship. These methods are the modelling (which is a demonstration that, thanks to the real experience, it becomes a cognitive model); the explanation (which gives to the novice all the information that he or she needs to complete the task); the coaching (in which the mentor monitors the novice practice); the scaffolding (that takes place as a gradual withdrawal of the mentor from the activity in order to give to the novice the opportunity to test him or her self); the reflection (in which the novice analyses his or her action); the articulation (in which the novice shares with the mentor his or her reflections) and finally the exploration (in which the novice is encouraged to express new ideas and viewpoints about the learning experience) (Enkenberg, 2001; Dennen, & Burner, 2008).

Also this model has weaknesses, as the organizational complexity of the steps and,even in this case, the limited involvement of academic staff limits the possibility of supporting the pre-service teachers' research skills, which have been identified by the European Union (2014) as key skills for teachers' education.

Anyway, this model has some important strength, as it facilitates the building of community of practices and puts particularly emphasis on reflection, which is essential to transform a practice into a knowledge experience.

1.2 The reflection: the apprenticeship compass

Before proceeding with the designing of a standard of apprenticeship that combines the strengths of the two previously presented models (the centrality of the learning potential of concrete experiences, the necessity to devote an extended time to the apprenticeship, the importance of building a community of practices, the essential role of reflection) we want to focus on the theme of reflection, which we consider to be a fundamental element that often is not given sufficient emphasis.

Reflection is a critical component of thinking that allows looking at the context in which we act in a profitable way, making the experience fruitful (Schön, 1987). Consistent with this view, a reflective practice arises as a junction point between a) «to think about what is going on», whether it takes place in the course of the action or retrospectively; b) and «to think thoughts» which is a higher mental activity that focuses on the way we develop the thought from our experience (Mortari, 2003, p. 25).

According to this, it emerges that to improve the reflective skills of teachers means giving them the tools they need to see the work through an interpretive lens, designed to identify critical areas and to assume effective educational strategies. Therefore, the reflection is not simply a cognitive act that, starting from a given problem, analyzes the situation and proposes an effective solution, it also investigates the dynamics of thought that accompanied this path (Mortari, 2009). The reflection for teachers is configured thus as «an intentional act of the mind» through which is committed when he or she is alone or in conjunction with others to query its own way of teaching (Lyons, 2002, p. 99). Through this practice, the teacher reviews and questions his or her actions, understanding the meanings that are at the basis of his or her thinking, and, at the same time, puts in action the interpretative process of the experience in which he or she is immersed (Lyons, 2002).

Hence, the reflection is what allows the teacher to see more deeply his or her experience, transforming it into experiential knowledge: a thoughtful and critical knowledge that interrogates practice to construct theories able to enlighten it (Mortari, 2009). These theories are comparable to what Argyris calls «theories of action» (1982, p. 85) and to what Sanders and Maccutcheon call «practical theories of teaching» (1986 p. 50). They are useful guidelines aimed to direct the action, and they arise when teachers analyze educational practices systematizing action strategies from conceptual frameworks. Initially, these theories mostly assume the appearance of a "knowledge of cases" and they are expressed through a discursive narrative form. Later they are formalized through an articulation able to specify their theoretical justifications and their argumentative structures, assuming the form of heuristic theories. This passage makes clear that the experiential knowledge does not exclude a connection with theoretical models, but rather takes them as tools necessary to refine the analysis of experience in a critical and constructive perspective that preserves its value without falling into a generalist trap. Being able to give birth to such knowledge is central to the professional development of teachers as it allows them to be no mere executors of theories decided by others, but to be individuals capable of building useful knowledge from the contexts in which they are immersed (Mortari, 2009).

It is not easy to implement this vision of reflexive thinking as it requires a specific commitment from the teachers. Firstly, because it needs a dedicated time, which is difficult to achieve in the flow of the teaching activity. In addition, it requires to be able to relate with a complex and non-preemptive experience: only being related to reality with an open mind and thoughtful approach, it is possible to cultivate the ability of analyzing the cases and develop new solutions which, if effective, may become part of the teacher's expertise luggage. It is essential to keep the contact with the reality from which it is born and to which he must return because only in this way it can express its transformative potential, accompanying the teacher in a process of elicitation of his or her knowledge through a critical and systematic analysis (Mortari, 2009).

This scenario makes evident how, in order to support the teacher in the development of an authentic and effective reflective competence, it is necessary to dedicate to this aim a specific and not extemporaneous training. The debate on the inclusion of reflective skills in teachers' training becomes central in the early Nineties, in Anglo-Saxon countries, when it becomes the focus of the action of institutions such as the Council for the Accreditation of Teacher Education (CATE) or the Higher Education Institutions (HEUs). These organizations are aimed to build a teacher able to face emerging educational challenges in a context characterized by a growing level of problematic. Therefore, reflexive thinking emerges as an effective way to response to this need (Moore, 2007).

The ability to use experience as a starting point to activate reflective thinking is considered particularly suitable for leading teachers to focus on their professional practice with a critical vision. According to this, the work of scholars such as Dewey and Schön show show the reflective practice is a pivotal point in the training programs of teachers and pre-service teachers. In particular, one aspect of the reflexivity that is considered useful in the teachers' training is its link with the narrative dimension. The narrative thought allows teachers to revise their act starting from multiple points of view and leads the subject to bring to light values, beliefs and theories that are subtended to their behavior, guiding them to a deeper and articulated reading of their lived experiences (Jalongo, Isenberg & Gerbracht, 1995; Conway, 2001).

A second aspect of reflexivity that plays a key rolein teacher training concerns the temporality. Max van Manen theorizes the need for teachers to develop what he calls «anticipatory reflection»: this term refers to the ability to reflect on actions in a future –oriented mode (1995, p. 33). According to this scholar, in fact, the teacher must be able to reflect in a pendulum that temporally goes from the moment that precedes the act, transits to the action itself, and closes, in a circular perspective, with the phases that follows it. The purpose of this transversal reflection is to weave, in a critical way, the moment of intervention planning, the implementation phase and the evaluation, directing more effectively future practices (van Manen, 1995).

The narrative and the critical elements are anchor points of the reflective thought. In this way, the reflective teacher is the one who looks at his or her own experience, analyzing it through a variety of tools and from different perspectives, in order to highlight his or her potential and areas of improvement. The reflective competence is therefore what makes a teacher not a mere executor of theories developed by others, but on the contrary makes him or her able to contextualize the educational dimension with a personal and critical vision of teaching techniques. And this kind of practitioner is essential to contrast the idea of teaching (and learning) as a routine practice, which produces a standardization of thought in the younger generations and a general fall of critical thinking (Valli, 1997, 2006).All these considerations have a great impact on the development of the debate on teacher training, leading to consider the development of the reflective skills one of the cornerstones for teachers' professionalism, with a solid theoretical base, an in-depth knowledge of educational contexts and the improvement of evaluative skills (Yost, 2006). Lastly, reflection is essential to provide teachers with the critical knowledge needed to face educational challenges and to develop the tools to strengthen their resilience to the stress related to teaching practices (Gay & Kirkland, 2001).

2. The experiential learning in teachers' education

From the early Ninety experiential learning starts to be part of the pre-service teachers' education and, despite the initial difficulties, it becomes more and more frequently used in classroom activities (Jamieson, 1994). Experiential learning is particularly suitable in pre-service teachers' training because it meets one of the aim of the teachers' education: to reinforce teaching skills and change attitudes and ineffective practices, providing conceptual framework against which reinterpret action styles built on the basis of intuitive processes and facilitate relationships and comparisons with other professional practices teaching (Steinert et al., 2009).

To acquire teaching skills is to gain knowledge and skills that allow the teacher to put in action learning strategies in a competent and effective way. Often, learning strategies are closely linked to active learning: this term identifies those teaching methods aimed to (i) showing the student's responsibility in the action of learning; (ii) implementing learning through concrete action, linked to the experience of the subject; (iii) developing critical and reflective thinking (Bonwell and Eison, 1991). To be involved in active learning means to be in contact with meaningful experiences inspired by the thought of Dewey, according to which it is unrealistic to pretend to reach a transformative learning without starting from real experience because knowledge can be reach through the capacity to look at the experience by reflective and critical thinking(Dewey, 1986).

The use of experiential learning strategies are particular suitable for the acquisition of experiential knowledge according to some of their essential elements: (a) a learning built around a concrete problem rooted in the context of reference; (b) a strong involvement of the parties involved, both from an emotional and a rational point of view; (c) a cooperative attitude that allows the structuring of the learning community. The experiential learning strategies are educational strategies that engage students directly in the field of experience giving at the same time space for reflection and therefore enriching its capacity of producing significant learning (Mortari, 2009). Anyway, it is clear that the use of these strategies «cannot succeed without a major overhaul of the relationships between universities and schools, ultimately producing changes in the content of schooling as well as teacher

training» (Darling-Hammond, 2006, p. 308). Therefore, experiential learning strategies cannot be mere exercises without any contact with reality: on the contrary they must be strictly tied to the concrete needs of the context in which future teachers will be called to act. For this reason, experiential learning strategies must be linked with apprenticeship and the best way to realize this aim, in our opinion, goes through Community Service Learning.

2.1 Service Learning (SL) and Community Service Learning (CSL) in pre-service teachers' training

Service Learning (SL) is a practice entered into the scientific literature between 1966 and 1967: Robert Sigmon and William Ramsey used the expression "Service Learning" to describe a project carried out at Oak Ridge Associated University (Tennessee) with the aim to connect university and organizations for local development. These scholars use the term to indicate an experiential educational pathway in which students are involved in an organized service activity addressed to the community needs and followed by structured moments of self-reflection. The goals of SL are at the same time the comprehension of knowledge content, the development of academic skills and the gaining of social values (Stanton et al., 1999).

Three are the 'principles' that are at the basis of the implementation of a SL project. The first principle states that the organizations involved in SL must have the power to supervise the action in the field. As a matter of fact, if they do not have the opportunity to express their opinions on the activity put in place to respond to their needs, this has a negative impact on the quality of the service. The second principle underlines that a 'good' SL project is one in which the members involved in the project become gradually more and more able to profitably 'invest' in the results of the SL, because their engagement in SL increases their own awareness of the situations they experience. The third principle affirms that the learners must have the possibility to manage their learning processes in order to make them significant (Sigmon, 1979).

In the last thirty years, SL has become a teaching practice in schools, colleges and universities, firstly in the American context, and then in the international arena. Today, the term is used to describe a wide assortment of activities that connects professional action and training (Felten et al., 2011). Precisely for this reason, SL does not have a single definition although one of the most popular definitions appears in the Community Service Trust Act of 1993 in which SL became one of the teaching tools officially promoted by the US Congress (Stanton et al, 1999). According to this definition, SL is a method through which students learn thanks to a service that: (a) is outlined in order to meet the needs of the community; (b) is coordinated by a school or a university institution (more rarely by a community service program or by the community itself). The active participation to this kind of service allows students to: (i) develop a sense of civic responsibility; (ii) strengthen their training curriculum; (iii) encourage the sharing of a reflective perspective of service experience (Kahne and Westheimer, 1996; Felten et al., 2011).SL links two main elements: (A) the service action, designed to meet the needs of the community, and (B) the learning experiences involved in this action, that consolidate academic knowledge. Anyway, both of these aspects have educational implications: (a) the service action leads to develop civic competency and civic responsibility, while (b) the learning experiences consolidate reflective attitude about civic engagement (Kraft, 1996).

Starting from this definition, we can see that SLis defined as a community-based educational tool in which students fulfill the academic goals of their courses and simultaneously contribute to the welfare of the community (Bringle & Hatcher, 1996; Domangue & Carson, 2008). However, there are some researchers who explicitly connect the term "community" to the expression "service learning" with the aim of pointing out the role of the community dimension; this leads to the use of the expression Community Service Learning (CSL).We use this term to refer to an approach that integrates community service and intentional learning activities, linking professional action and training. It is defined as «curriculum-based community service that integrates classroom instruction with community service activities» coordinated by an educational institution or university. This approach leads students to gain learning goals through active participation in service action aimed to meet the needs of the community (Cairn & Kielsmeier, 1995; Skinner & Chapman, 1999). According to these considerations, CSL is SL in which special emphasis is given to the link between college and community, including «responsiveness to real community needs and reflection upon community service as part of academic courses» (Boyle-Baise, 1998, p. 52). Both CSL and SL have 'many potential benefits for students' because they not only help students to reach academic and social achievement but they also increase students' «self-esteem and self-efficacy», enhancing «motivation and interest in school» (Wade, 1997, p. 237).

For these reasons, these learning tools are used in several institutions of higher education, and particularly in the pre-service teachers' education, to offer students the opportunity to connect in-classroom learning with real life experiences (Anderson, 2003).Within the many SL experiencesin pre-service teachers' education, we want to focus our attention on the ones with an explicit focus on the community dimension (CSL) because they permit to contextualize our proposal. Indeed, our program not only seeks to meet the community's needs but it also seeks to involve the members of the community in order to give the man active role in the definition of these needs. CSL emerges as a particularly effective way to help the construction of a teaching profession capable of addressing not only the real problems of the school but also of the environment in which the school is located. Indeed, when it is applied to the pre-service teachers' training, CSL sets up a service action that connects pre-service teachers with in-service teachers. Therefore, it enables pre-service teachers (a) to strengthen their training curriculum through an experiential path, (b) to develop a sense of civic responsibility toward their community, and (c) to encourage the reflective sharing of their experiences. Moreover, CSL helps pre-service teachers to develop the capability to plan projects that meet both community needs and curriculum objectives (Wade, 1997; Stoecker, 2010).

It is also important to underline that CSL meets the European Commission recommendations about pre-service teachers' training. Indeed, European institutions affirm that dialogue and collaboration between schools and universities are essential to promote effective pre-service teachers' training. CSL allows pre-service teachers to get in touch with the daily reality of the school and the community of teachers from the perspective of apprenticeship, drawing on the wealth of wisdom and expertise that they have accumulated as well as the needs that teachers and children express (European Commission, 2014). Moreover, CSL helps pre-service teachers to understand what it means to be able to act in a service-oriented manner. Indeed, service actions in CSL are not just connections between two parties (the pre-service teacher and the in-service teacher) but they are a relationship that involves the whole community in which the CSL is set. Pre-service teachers are primed to support their environments in temporally extended experiences, characterized by constant comparison. This makes the CSL a transformative moment not only for the teachers who are directly involved in it but also for the whole environment in which this experience is set (Boyle-Baise, 1998; European Commission, 2014).

Indeed, CSL promotes in pre-service teachers a reflective attitude and, as previously underlined, leads students to discover that facing the real problems characterising real educational contexts means to be able to analyse their practical experience in order to evaluate theories of education rooted in experience, which are meaningful frameworks for practice (Wade, 1995). Indeed, reflection plays an essential role in the professional life of teachers, particularly because it allows them to reach the transition from technicians to competent professionals (He& Prater, 2014). Teachers can face the problems they encounter in their professional practice in two different ways: mechanically or reflexively. In the first case, teachers find education solutions that others have created and experienced and merely apply them. In the second case, teachers use their knowledge as a tool kit, drawing what is needed from it to create teaching tools focused on the specific needs of the contexts in which they work. The second method is the model of a teacher who is simultaneously a skillful craftsman, a thoughtful expert and a researcher because he or she considers the educational practice as a research field, building pedagogical knowledge from experience (Schön, 1987).

Finally, CSL is a particularly effective training practice that should be incorporated into teachers' education courses because it not only addresses the community needs but it also improves the quality of teachers' preparation.

2 Putting in practice a new vision of apprenticeship: our pathway

The Master's Degree in Primary School Education at the University of Verona is a five-years program that combines a Bachelor's and Master's Degree in Primary Teacher Education. During the2014-2015 academic year, the program started a CSL Program that involved (a) senior students, (b) in-service teachers coming from different schools in the surrounding urban area and (c) an academic team that collectively assumed the role of supervisor. This program, which is currently on its third annual run, is implemented with the following steps.
The first step involves the students' preparation and provides them with the preconditions necessary to attend the program. It takes place during the Course of Educational Research (60 hours) and the related Workshop (15 hours) that are parts of the Master's Degree in Primary School Education.During this training period, students are provided with insights that will help them to manage their CSL experiences.

They learn what a CSL project is, what the bases are on which it is implemented, what elements define its success and what outputs are required to achieve it. They also become familiar with the tools that they would need to plan, to observe, to document and to analyse their CSL experience. More specifically, they learn how to design an intervention starting from a specific need (that involves teaching, learning or an educational issue), how to use qualitative observation tools in a school context, how to create a report that keeps track of all the activities involved in the different phases of the experience and how to analyze these actions in order to improve their efficacy.

The second phase involves the encounter with the schools, concretizing the meeting with the community, and it has a double aim. On one side, by the means of the academic team, it connects the pre-service teachers with the in-service teachers, belonging to different schools within the urban area, in a one-to-one relationship. This "connection" is managed according to two different criteria. The first criterion regards the age of the students the pre-service teachers want to teach, because they are connected to in-service teachers who have teaching experience with students of the same age. The second criterion is a "logistic" parameter: as the apprenticeship route covers about six months, it is easy for pre-service teachers and in-service teachers who belong to nearby areas to create a close relationship. It must be underlined that the internship period should not cover a prefixed number of hours; its duration is defined by a mutual agreement between the pre-service and in-service teachers to ensure the achievement of the CSL program.

And this brings us to the second aim of this phase: the identification of the community's need. Often in SL programs (but sometimes also in some CSL programs) students are in charge of discovering the needs of the contexts in which they are involved. Therefore, a survey phase is implemented preceding the entrance of the pre-service teachers in the context. Alternatively, in this project the needs of the contexts are defined during the first weeks of work as a result of the discussions between the in-service and pre-service teachers. This choice ensures that the needs on which they will work during the experience will be relevant for the context as we think that to be more coherent with a project that seeks to be a *Community* SL. Furthermore, these discussions are crucial to build a relationship of mutual trust between the pre-service teachers and the in-service teachers. Indeed, in this CSL program the in-service teachers are not the *recipients of an action* that someone performed upon them; they actively co-operate with the pre-service teachers and with the academic team, who supervises the whole operation, contributing to it thanks to their knowledge and experience. In this sense, this project is an opportunity to 'refresh' the meaning of internship according to a collaborative logic that gives value not only to the transformative potential of the pre-service teachers (supported by the academic team) but also to the knowledge that in-service teachers have built over time.

The third step of this project concerns the service action: pre-service and in-service teachers are called upon to design an action (an educational program, a teaching program, an evaluation program, etc.) aimed to respond to the previously identified needs. Their roles within the different phases of this action are decided by mutual agreement not only with the aim of implementing the action itself but also with the aim of gaining the training objectives of the CSL experience. During this phase, the academic team has the responsibility not only to supervise the design of the action, supporting them in case of need, but also to mentor the pre-service teachersin order to establish with each of them the educative goals that they must reach. Moreover, in this step, the pre-service teachers use qualitative observation tools to collect data about the action, and they create a report that keeps track of all the activities involved in the different phases of the action itself.

Finally, the last phase of this project regards the development of the dissertation. Indeed, what makes this program particularly relevant is that it not only improves the reflective competences of the pre-service teachers through their being part of a CSL project, but in the meanwhile it develops their research skills through the writing of a research dissertation based on the experience of the CSL. The idea at the basis of this choice is that, even if research skills are increasingly seen to be essential for the professional definition of teachers (as affirmed by the European Commission in 2014 in its Directorate General for Education and Culture School policy) teachers trainings are very rarely directly aimed to develop their research skills. As underlined in the next session of the article, this aspect represents one of the strength point of the program and it provides that the pre-service teachers use the data collected during the previous phase to analyze the action with the in-service teachers and this analysis gives feedback on the work they enacted. They also use these data to aid the development of the dissertations they have to write at the end of their master's degree. This dissertation takes the form of a research dissertation or, better yet,a dissertation that tracks transformative research.

The dissertation retraces all the steps of the CSL, underlining that the CSL can be read as a service research (Mortari, 2017): it starts with the identification of a problem (the need of the contexts), it proceeds with the development of an intervention aimed to solve the problem (the action) and the collection of data regarding the problem, and finally it ends with an analysis of the action in order to discover if it was well calibrated and how its efficacy can be improved.

3.In conclusion: positive achievements and areas of improvement

Based on what we discovered during these three years, we can trace the positive achievements of the University of Verona's CSL Program, besides the ones already highlighted by the scientific literature on the usefulness of this tool in pre-service teachers' training (see 2.2). The first one is the value of the experiential knowledge of the in-service teachers. Thanks to their past experience, in-service teachers have accumulated a knowledge that can be called 'experiential': *c'est à dire* a knowledge gradually built from the insights derived from facing the problems connected to class life. In-service teachers use this experiential knowledge to find solution to the problems that they encounter in daily practice, creating educational solutions as far as possible based on evidence (Schön, 1987; Mortari, 2003). This CSL program gives value to the in-service teachers' experiential knowledge and strengthens it both through the construction of the action with the pre-service teachers and the discussions with the academic team that supervised the action.

The second positive achievement is the development of pre-service teachers' research skills. Indeed, the European Union stressed that research skills, combined with reflective skills, are essential to build a teaching profession that can respond effectively to the needs of the context in which it is located (European Commission, 2013). This CSL program formalizes the achievement of this goal through the development of dissertations that assume the form of research dissertations. This means that these dissertations do not start from an intellectual curiosity, not directly experienced in professional practice. On the contrary, they report the actions developed in response to the needs expressed by the community and the analysis of these actions underlines their strengths and weaknesses. This not only embodies the principles of the Community Based Research, giving value to the CSL program (Stoecker, 2010), but it also responds to a specific training aim: to develop pre-service teachers' research skills, connecting them with a practical (and professional) purpose.

Despite these positive elements, the experiences accumulated from the University of Verona's CSL program allow us to identify areas of improvement. The first one is the necessity to make the link stronger between the in-service teachers and the academic team**.** The meeting between the in-service teachers and the academic team marked the turning points of the program but they are not frequent. This choice was originally taken in order to spare the in-service teachers extra work. Nonetheless, with the passing of time, the in-service teachers asked for more frequent meetings with the academic team because being able to reflect on their shared experiences led them to feel more 'engaged' and improved their motivation.

The second aspect that needs to be improved is the involvement of the Principals. In the past, the collaboration with the scholastic institution was 'light' and involved Principals merely in the authorization phase of the project, but this experience showed us that a more official mandate is needed from the Principals. This not only for bureaucratic reasons but also because the formalization of this process would lead the in-service teachers to be more supported by the Principals.Then, analysing our experience, it emerges it is necessaryto increase the time devoted to the program. Until now, mainly for practical reasons, we have only involved the senior students in the Program; however, it would be appropriate to increase the time that the pre-service teachers spend in the contexts. For this reason, it would be advantageous to involve students starting from their fourth year.And finally, in order to formalize our program, we discovered that it is important to write a Charter of the Principles that inspired the Verona' CSL program. This is not only a formal step but it is also important to spread the ideas that are at the basis of our CSL program with both the academic world and the community. These considerations are linked to the broad debate that, from many sides, stresses the need to reform the apprenticeship within the Master's Degree in Primary Teacher Education. We believe that the path we have here proposed can have a voice in this debate because we think that it would be able to strengthen the apprenticeship system, making it more capable at addressing contemporary educational challenges.

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