

PROFESSIONALIZATION OF TEACHERS AND PROBLEMATIZATION PROCESSES*

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ABSTRACT: This article presents the path and the results of research aimed at developing innovative teaching approaches in the context of academic courses for in-service teachers as regards their professional training.

KEYWORDS: teacher education, professional training, didactic models.

1. Introduction

This article presents the lines and findings of a research study whose aim is the fine-tuning of an innovative, didactic training model within a 1st level professional Master's degree programme in *Didactics and Educational Psychology for Specific Learning Disorders* introduced by the Department of Philosophy and Education Sciences at the University of Turin, in collaboration with the MIUR (*Ministero dell'Università e Ricerca Scientifica* – Ministry for Higher Education and Scientific Research) – USR (*Ufficio Scolastico Regionale* – The Regional Schools Office) of Piedmont (A/Y 2011-12; 2012-13), addressed to teachers of any type and level of school. The author, in her capacity as director of the Master's degree programme, assumes responsibility for the didactic planning of the Course, seen as a crossroads between the practical and professional knowledge areas of teachers, and the scientific and subject-specific knowledge areas offered by the formal-type teaching provided by the Master's degree, a potentially strategic learning lever in professionalization management. In relation to restrictions of a general nature, University-related, and available resources) the research study lines began from the problem: *how do we respond, via education and vocational training of a university nature – with specific reference to traineeship activities – to the needs of the professional development of teachers in service in relation to action planning and management, contexts and didactic and educational actions such as to promote integration of all students, with specific focus on those with SLD? In this context, which areas of profes-*

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sional action are most critical from the standpoint of teachers in schools and need to be monitored in the planning of university professional in-service training?

2. Theoretical framework

From the standpoint of primary theoretical and methodological assumptions, one of the main tasks of research in the pedagogic and didactic field pivots arounds the processing of knowledge supporting the professionalization of teachers and educators in managing the definition of models, mechanisms, and training-based professional practices in line with the complex, fixed and dynamic nature of didactic and educational actions (Van der Maren 2014; Furlong, Oancea 2008). Taking this context of a general nature to define a didactic case model structuring the traineeship path of the Master's degree programme, exploration was undertaken of academic works that gathered elements to answer the question: *given the resources and actual restrictions, in relation to the identified training objectives, what operational criteria need to be adopted in the development of a traineeship path directed towards supporting the professional development of teachers?* Several aspects which need to be monitored came to light. *These points will be briefly illustrated.* Within the debate on the applicability of the concepts of 'profession' or 'professional development' to a teacher's job, in the most recent academic papers, the position is commonly adopted attributing to teaching the nature of a professional activity, albeit with distinctive characteristics (Damiano 2004). Generally speaking, it is held that teachers may be considered professionals in that their job essentially consists of the creation of non-routine intellectual actions with a view to pursuing objectives in the complex situations in which they operate, with a significant degree of autonomy and responsibility, starting with a personal and study background built on multiple 'resources' and forms of theoretical and scientific and practical and experience-based forms of knowledge (also involving the ethical and value-related sphere) (Paquay, Altet, Charlier, Perrenoud 2006; Perrenoud 1999a). From this perspective, theoretical knowledge in the education area – 'for teaching' – may be resources to develop professional 'action potential', if acquired in a spendable form, in response to teachers' need for professional training. Reference to the 'Reflective Practitioner' paradigm (Schön 1983) provides the foundation for proposing a criterion of didactic transposition of 'educating and teaching' knowledge areas as theoretical and conceptual frames helpful to teachers for carrying out and analysing their (own and that of others) didactic and educational practices and the assumptions underpinning them (Altet 2010). To

carry out their job, professional teachers would need to be able to tap into an integrated multiplicity of references in a rational way, both of a theoretical and general nature and derived from experience, to be able to contextualize, thanks to a personal effort of interpretation, the issues to be dealt with and the possible strategies for solutions, in a kind of dialogue with the situation which passes via the action – ‘reflection-in-action’ – and entails recognizing, reviewing, and developing one’s own theoretical, conceptual and operational methods. Research contributions of an anthropological origin, based on analysing the forms of knowledge that teachers activate in doing their job, make the learning potential of theoretical and scientific knowledge areas ‘for teaching’ particularly problematic, since they are conditioned by the possibility of linking them to tangible, operational situations and detailed tasks (Tardif, Lessard 2004). A generic reference to experience is not being called into question but rather the setting up of training mechanisms which can enhance the job as an authentic ‘mediator’ in the building of professional knowledge. Other indications in favour of professional training, experience-based approaches, can be recognised in the theory of adult learning from a ‘transformative’ perspective, in the theoretical reasoning supporting competency-based approaches in professional training and in the research branch attributed to professional didactics of French-speaking origin. Amongst the methodological and operational implications of the transformative learning theory to be taken into consideration in training programmes, one criterion recommended in the offering of additional content/knowledge concerns the active building of relations between new cognitive factors and previous knowledge areas, so as to promote the evolution of personal, interpretative frameworks (Mezirow 2003). Elements which are also essentially aligned with implications for factors concerning curriculum planning in the development of training sequences, originate from the generation of professional training, competency-based theories. In this case, also starting by recovering experience-based learning theories, we can trace ‘spiral-shaped’ development paths, coming from lived experience (action, creation of an activity, etc.), followed by a first phase of performance-reflective practice, directed towards rebuilding events, reinterpreting them and transforming them via narration to render them intelligible; followed by conceptualization and modelling, via de-contextualization, which aims at identifying more general and stable strategies and models, to be reinvested at a later stage, on returning to practice in other more or less similar contexts (Le Boterf 2000). Professional Didactics has thematized the issue of the relation between practical and theoretical knowledge areas, in terms of a divi-

sion between ‘cognitive models’ and ‘operational models’ (Pastré 2007). Professional learning would primarily consist of the acquisition of pragmatic concepts or action organisers – ‘operational models’, learned directly in context and referring to a class of professional situations within the ambit of a practice community. Alongside concepts that reference a pragmatic model, other conceptualization methods or ‘cognitive models’ come into play which concern the characteristics of the action ‘beyond’ the transformative tension felt immediately while the action is in progress. In professional learning, the operational models learned in practice refer to cognitive models that may be explicit and formalized when they are based on scientific knowledge areas or, more often, are largely implicit and informal, as can occur in the case of professional activities with a high rate of complexity, such as teaching. It is important to consider the type of division which may be established in learning between cognitive and operational models. A professional learning course, to allow a certain autonomy and efficacy at an operational level, in addition to a detailed reference to specific situations, requires cognitive and operational models to be clearly separate and recognizable, while at the same time succeeding in creating a reciprocal dialogue, a dynamic that allows both to evolve and also allows practice to evolve. It is desirable that cognitive models, to represent a useful basis for the building of operational models, are attributable to clearly identifiable knowledge areas validated ‘through testing in the field’, in practice and by practices, and which are offered in relation to problematic situations, i.e. ill-defined problems that need to be framed, defined, and handled in a partially innovative manner. In the field of theories concerning possible didactic training models, at least in relation to the reference context (Damiano 2014), we find evidence of ‘practice didactics’, based on the alternation of direct experience – according to standard strategies, such as, for example, observation and imitation of model actions and co-operation, followed by recording them as encoding of observation and rendering imitation explicit, complements to the execution and occasions for carrying out the actions, invaluable for promoting abstraction, i.e. for identifying the core of the didactic action in context, to examine it from a decontextualized and generalizing perspective, also thanks to comparison with formal teaching knowledge areas, via forms of representation and analysis of the aspects that form them; this, as a function of a more complete conceptualization by the teacher undergoing professional, action-based training and possibly formalization in modelling terms and the appropriation/building of teaching theories that are capable of directing operational choices which are intentionally well-founded.

2. *Educational instrument*

Planning restrictions provide for division of the 60 academic credits (in Italian CFU – university academic credits) attributed to the Master's degree (following an overall modular system: 3 modules, each worth 20 CFUs, at 'foundation', 'intermediate' and 'advanced' levels), in 41 CFUs to be allocated to subject-related teaching, and in 14 CFUs (350 hours) for professional training placement. A traineeship pathway unfolds that is essentially addressed towards promoting the fine-tuning/development of professional competence, understood as identification and analysis of practical and operational problems linked to integration in the class of students with SLD, with review, as a pro-active and relaunching function, in relation to conceptual and theoretical frameworks offered by the subject-related knowledge areas taught during lectures. To promote interconnectedness with the teaching of subjects, the traineeship activities have been developed in three stages, I, II and III, respectively, according to a scheme alternating workshop traineeship at the academic location and activities in schools. As far as traineeship instructors are concerned, since we can only count on the limited involvement in mentoring tasks of staff in schools, due to organizational and management restrictions, instructors appointed by the University have been given this responsibility (according to an instructor-course student ratio of 1:10), selected from amongst teachers in service, based on their educational and professional curriculum in the field of teaching students with SLD. The action of the traineeship tutor is supported by a brief, initial training course, ongoing co-ordination meetings, and the setting up of a structured working guide. The tutor action consists in preparing the traineeship activity in the school and in promoting integrated activation of the 'practical' and formal knowledge areas acquired, through analysis and discussion of the cases observed (Altet, 2000) thanks to inter-professional discussion and exchange within the small group and one-on-one tutoring actions (Wenger 1998). The subject of observation-analysis-problematization and development within the ambit of the traineeship and the didactic action of the teacher understood as «mediation action», refers to «what the teacher does in relation to what the student does for learning cultural subjects» (Damiano 2013: 133). In the first module, work delivery includes the observation and reconstruction of a didactic action (lesson or cycle of lessons characterised by didactic and training consistency), according to a structured schedule. Followed, also thanks to group discussion mediated by the traineeship tutor, by analysis of the actions observed, strengths and critical points, commencing

from professional experience and theoretical elements offered in the subject-relating teaching of the Master's programme, to be formalized in a project work assignment, to be developed throughout the entire traineeship study path and the subject of a final assessment at the end of the Master's degree). In the second module, in relation to the situation observed, the course student is asked to identify situations-problems of a professional nature (Pastré 2007; Perrenoud 1999b) arising from teaching in cases of students with SLD, prior to sharing the operational definition of the concept (situations presenting obstacles, challenges and problematic cases that raise issues – also of an ethical nature – reflection – also at a metacognitive level – in relation to the planning and management of didactic sequences, learning assessment, management of the relationship with students and relations with colleagues and families). Active involvement in class with a debriefing interview by the teacher (Vermesch, 2011) and subsequent description and analysis also in relation to conceptual and theoretical elements during the Master's degree lessons. Work delivery within the third module provides – given the situation-problem previously identified and also in the light of learning acquired of a conceptual and theoretical nature regarding teaching in mixed classes with students with SLD – for the definition, whenever possible, via discussion and exchange with class teachers – of possible objectives for improvement, identifying cases for innovative action regarding methods to monitor impact.

3. Methodology

The research originated from the need to obtain elements providing empirical confirmation of the theoretical premise, according to which a didactic professional programme based on the rationale of 'immersion-decontextualization' and focussing on promoting problematization processes linked to the action of teaching, based on the synergic activation of areas of knowledge of a scientific and discipline-oriented and teaching area-related nature, linked to the practice of working as a teacher, may represent a path that is potentially effective in the professional training of teachers in an academic environment. The research also set out to gather – from an exploratory standpoint and from the perspective of teachers– items of knowledge that could prove useful for identifying particularly critical areas in managing teaching practices in mixed classes. Contexts which need to be taken into consideration when planning teacher training courses and which are the focus of in-depth study as part of the research in the pedagogic and didactic field. The study re-

fers to the system tested during the second edition of the Master's programme in the A/Y 2012–2013 (pre-tested and fine-tuned over the first year of the course in A/Y 2011–12: sample of 71 Master's programme students). The research sample consisted of 52 teachers in service in Piedmont schools (6 pre-school teachers, 32 primary school teachers and 14 middle school teachers), enrolled in the professional Master's programme. Survey of the impact of professional placement was conducted by means of project work required from Master's students. The observation context was represented by schools within the Piedmont region with agreements in place with the University of Turin, as venues for professional placement (in pre-schools, primary, middle, and high schools). To extend the experience of professional knowledge areas, the Master's students were able to choose their placement also at school levels which were not their habitual teaching level. The training instrument was thus "tested" with a random sample of graduating students, in any case, held to be significant for a first validation, as was the choice of the observation environments. The unit of analysis of the textual material obtained was represented by identifying situations/problems – SP – of a typical and recurring professional nature arising from teaching in classes with the inclusion of students with SLD, from the standpoint of Master's students or a set of teaching actions habitually used by teachers, with the aim of creating conditions to favour learning in their students, which could be improved according to the reasoned and critically-based analysis of the Master's course students. To render the construct operational, the survey took the SPs described by course students into account in terms of 'action flows' observed in context and identified/explained by the actors, analysed with specific reference to theoretical and conceptual elements progressively consolidated/learned during the Master's programme. All written work produced regarding the second session of project work was subjected, by the author, to analysis of the subject matter, adopting a post-encoding process and a subsequent grouping into categories (with the support of N-Vivo 10 software), with frequency calculation (Trincherò 2007; Miles, Huberman, Saldaña 2014).

4. Results

A first finding of the analysis concerns the nature of problematization processes regarding professional practices, to which the learning system gave rise. A positive impact was found, with a high rate of SP identification 'in the strict sense', attributable to precisely described professional practices (Tab. 1: 0.1).

Table 1

0. Analysis of professional practices and problematization processes		Pre- school f.	Primary. school f.	Middle. school f.	High. school f.	Total f.	Total f.%
0.1	Problems focussing on profes- sional action in context (SP)	15	37	38	37	127	93
0.2	Problems focussing on the student			1	1	2	1
0.3	Problems focussing on con- text conditions		2	2	1	5	4
0.4	Problems focussing on teacher	1	1	1		3	2
Total		16	40	42	39	137	100

The analysis of surveyed SPs highlighted three areas identified as critical D: defining and managing learning strategies (Tab. 1:1.1), classroom management (Tab. 1: 1.2.); problems associated with identifying and taking charge of cases of children with SLD.

Table 2

1. Problematization focussing on professional action in context (SP): environments		Pre- school f.	Primary. school f.	Middle. school f.	High. school f.	Total f.	Total f.%
1.1	Managing didactic progression and mediation	4	15	23	23	65	51
1.2	Classroom management	5	14	13	10	42	33
1.3	Diagnostic practices and taking charge of students with SLD	6	8	2	4	20	16
Total		15	37	38	37	127	100

Within the context of SPs attributable to managing didactic progression (Rey 1999) and mediation, a stage indicated as highly problematic is the continuation of teaching practices which are largely transmissive and abstract; a point reported concerns the limited appreciation of the potential of multi-modal and multi-media communication using teaching technologies (Calvani 2011) (Tab. 3: 1.1.1.; 1.1.2.). Of note is the finding that there is scarce contextualized awareness of the ways for using compensatory tools and the exemptive measures provided under legislation supporting learning

by students with SLD¹ (Tab. 3: 1.1.3.) and methods for managing assessment practices, at times scarcely perceived at a docimological level, with limited appreciation of the learning support potential and for the teaching action (Tab. 3: 1.1.4) (Maccario 2012). The subject of foreign language teaching reveals its own critical areas, (especially in high school), associated with the offering of learning activities heavily based on decoding the written language (Tab. 3: 1.1.5). At times, the source of the problems in managing teaching in class can be identified in the excessively standardized/formalized planning practices adopted by schools that are ill-adapted to the actual, contextual conditions of classes and individual students (Tab. 3: 1.1.6).

Table 3

1.1 Management of didactic progression and mediation		Pre- school f.	Primary. school f.	Middle. school f.	High. school f.	Total f.	Total f.%
1.1.1	Prevalence of classroom-taught lessons (deductive-abstract evolution, dominance of oral mediation and uniformity of requests to students from the standpoint of performance).	1	6	6	9	22	34
1.1.2.	Limited use of the communication potential of technologies.	1	1	4	4	10	15
1.1.3.	Formal/scarcely personalized use of compensatory tools and exemptive measures.		3	5	5	13	20
1.1.4	Limited explanation of assessment and judgement criteria; focus on results from a summative standpoint.		4	5	4	13	20
1.1.5.	Scarcely personalized teaching of foreign languages.			2	1	3	5
1.1.6.	Formalized/lack of planning practices.	2	1	1		4	6
	Total	4	15	23	23	65	100

In classroom management, the research identified that maintaining class discipline is a problem, as are suitable conditions for involving students with scholastic vulnerabilities (Tab. 4: 1.2.1). Noteworthy,

¹ Compensatory tools are teaching and technological tools that replace or facilitate required performance in deficient learning ability.

and a recurring factor, is the management of didactic communication following a method which effectively selects the more prepared students, marginalizing those in difficulty (following a phenomenology already noted in the literature (Perrenoud 1997; Kahan 2010) (Tab. 4: 1.2.2) and scarce attention to building motivating relations with students (Charles 2002) and promoting in students, respect for diversity and co-operation (Tab. 4: 1.2.3). It can be seen, in several cases, that organizational conditions supporting learning are unsuitable for encouraging the involvement of students with SLD (Tab. 4: 1.2.4) (Tomlinson 2006; Vio, Toso 2007; Cornoldi 2007). As for taking charge of students with SLD, it can be seen that, at times, there is limited investment in communication/co-operation with their families (Tab. 5: 1.3.1) (Vio, Toso 2007; Epstein 2009).

Table 4

1.2 Classroom management		Pre- school f.	Primary. school f.	Middle. school f.	High. school f.	Total f.	Total f.%
1.2.1	Difficult classroom management, discipline/involvement	2	4	1	3	10	24
1.2.2	Selective dialogue and limited reciprocal communication		3	5	1	9	21
1.2.3	Limited attention to relations with and amongst students as a function of learning success	1	3	3	4	11	26
1.2.4	Organizational/management conditions and non-differentiated learning support actions	2	4	4	2	12	29
Total		5	14	13	10	42	100

Table 5

1.3 Diagnostic practices and taking charge of SLD students		Pre- school f.	Primary. school f.	Middle. school f.	High. school f.	Total f.	Total f.%
1.3.1	Limited communication strategies and educational alliances with families	2	3	2	2	9	45
1.3.2	Late/uncertain identification of problems at school attributable to SLD	4	3			7	35

1.3.2.	Interpretation/application difficulties regarding SLD diagnoses issued by social and healthcare services.	2	2	4	20
	Total	6	8	2	4 20 100

4. Final remarks

The research conducted, although limited, confirms the possibility of offering university courses focused on the professional placement of teachers to enhance their professionalization, based on a dialogue between practical/experience-based areas of knowledge and an alternation of didactic occasions/settings, within a framework of training synergies between university and school that provide for an adequate assumption of responsibility and the training of teachers to take on mentoring functions (possibly also in context). The study also appears to indicate that the possibilities for creating inclusive and personalized teaching to the advantage of students with SLD – but not only limited to these – are particularly linked to a full review of teaching methods and development/fine-tuning of the competences required of teachers for ‘creating a class’ (Rey 1999) as a community for student learning.

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