How can I do? The representations of secondary school student-teachers about school practices

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Abstract

University of Bari carried out an investigation among future secondary school teachers. It aimed at recognizing their representations towards the school environment they are about to enter.

The investigation had the following two level-structure:

- thanks to the analysis of the questionnaire about representations filled out by 300 student-teacher, some features of the “average student” and the “average teacher” was created;
- thanks to the text analysis of the papers written by a representative sample it was possible to get to know some of the strategies considered efficient to solve critical cases etc.

Cross data analysis allows to achieve more complex and detailed representations, thus leading to more in-depth analysis, as far as didactic research is concerned, and more detailed indications, as far as training plans design is concerned.

Keywords: Classroom Teacher Education, High School Teacher Education

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1. Introduction

Students who start a training path to become teachers are not a blank slate but they have their own – completely personal, not formal, and often unaware – representations about the school, teaching and students learning procedures.

Such representations matter when it comes to starting a teacher training path. In Italy, the latter is long, complex and frequently changing due to political reasons, that influence and affect how the training itself and the first teaching experiences - carried out during the training period - are evaluated.

The different characters who perform a role in the future teacher training period (teachers, tutors, mentors, etc.), and who have the main task to prepare the teachers to professional habits, cannot ignore the influence of those representations and operate starting from a “level zero” of their training.

This is why, thanks to the research suggestions (Tillema, 1998; Rayou, 2008), qualifying teachers degree courses offer more and more useful training tools (such as interviews with the tutors, reflexive practice labs, educational autobiographies etc.) so that a future teacher can get to know the representations that the students have before, during and after entering the school as trainees.

This essay presents the investigation carried out by University of Bari at the qualifying training course for secondary school teachers (called TFA which stands for “tirocinio formativo attivo”), taking place in the wider course of General Didactics.

Such investigation was meant to analyze in depth, though a semi-structured questionnaire, the knowledge of the representations about the school practice and the images (Baillauquès, 1996) of “average student” and “average teacher”. The latter can help or affect evaluations and choices so that the involved characters in this training process - aimed at future teachers - can receive some suggestions.

In particular, the characters involved are:
- internship tutors, working around deconstructing misconceptions (Krebs, 1999) and modifying student-teacher schemes;
- curriculum designers, working to chose efficient solutions to train professional teachers (Altet, 2009).

1. Theoretical framework

Student-teacher representations

Studies about reality representations that people have - arose from sociology and social psychology researches (Moscovici, 1981) - have the advantage to open new perspectives and go beyond that truism that has often affected traditional research settings (reality is self evident and what the subject thinks of it has no relevance in its knowledge).

Representations defined as: "ordinary, everyday attitudes, which are often less naïve than they appear (...) conceptions (that) are actually social constructions, with a multiplicity of significances” (Mugny, Carugati, 1989, ix) – are, instead, strictly connected to different social behaviors and ways of thinking and behaving of every single person (Mugny, Carugati, 1989). As far as teacher education is concerned, we refer to early 80s investigations about the “Teacher Thinking” aimed at knowing school workers representations about teaching, students, classroom climate (Elbazi, 1983). These studies had the honor to set up a new perspective about the teaching practice and about the complex teaching-learning dynamics itself and to understand the clear difference between formal knowledge and thought knowledge (Shulman, 1986).

The investigations, in particular those about the representations of the student-teachers, gave the opportunity to unlock further investigations perspectives about training curriculum and the connections between the theoretical path (university course) and practical path (internship and laboratories) (Tillema, 1998).

Schmidt e Knowles (1995), using Jordell model, demonstrated that the “beginner teachers” (the novice) behave depending on four different levels of influence when they face concrete situations of everyday school life for the first time:
- personal: biography, previous experiences, personal education;
- environmental: class, context, students, teacher- student integration;
- institutional: colleagues, managers, parents, but also curriculum and administration settings;
- structural: in particular referring to the economical, social and political influences the school is affected by.
Therefore, four could be the groups of factors influencing initial teacher training:
- personal stories and past actions models defining the behaviour;
- personal comprehension of oneself in the teaching role;
- problems associated to planning, teaching and class management;
- problems associated to school context and relationships with tutors or mentors.

2. Method

The investigation involved 300 student-teacher attending the General Didactics course within the qualifying training pathway called TFA (Tirocinio Formativo Attivo) accessible only through a strict selection and that requires the future teacher to commit for about a year in courses, laboratories and internships.

This study was carried out based on an quasi-experimental design (Campbell, 1988; Becchi, 1997) involving two groups on a non casual sample and has followed two phases:
- in the first one - March 2013 - 300 student-teacher who had signed up for the Course were given a semi-structured questionnaire about representations to be filled out. Data about the two sections “average student” and “average teacher” were analyzed;
- in the second - May 2013 – open questions belonging to the questionnaire were analyzed. In them, student-teachers described some strategies to solve complex cases. According to lexical-textual approach, a representative part of the corpus (60 out of 300) was analyzed. These 60 items were chosen based on personal curriculum and experience - to evaluate the constancy of observed data through the structured items (Migliore, Tuzzi, 2006; Bolasco, 1999).

Participants

The 300 student-teacher belonging to the Course in General Didactics of the TFA have several different features: they are graduated in different areas (humanistic, scientific, law etc.), are slightly mainly women (62%), are 32 years old and have 3 years of unqualified teaching experience on average. All the student-teachers had already attended 80% of the internship in school – corresponding to about 320 hours- when they were asked to fill out the questionnaire.

Two groups have been taken into consideration in analyzing the questionnaire:
- the first, younger, have no previous teaching experience, except the internship (we define them beginners);
- the second, older and with direct experience in the subject they are training for or in other areas, in addition to the internship (i.e: training courses, University lessons as a ph.d) (we define them experts).

These features have been cross-checked with the data arose from the analysis of the representative group whose open answers have been chosen to be analyzed.

The questionnaire about representations

The questionnaire about representations was given out to 300 students following a meeting to present the investigation. It is a structured questionnaire made of 30 items –20 of which multiple choice – divided in 2 sections: the “average student” and the “average teacher”. It was built through experimental interviews and the re-elaboration of the Questionnaire about representations of the profession confirmed by Kempf and Rousvoal (1994; Rousvoal, 1993).

Studies that used the questionnaire to collect data about the representations of the teaching practice, prevailing in France since the 70s (Codol, 1969; Abric, 1970) proposed - and confirmed - reference models coming through research. Items about characteristics of the students refer to 4 typologies (Trinquier, Clanet, 2001):
- enthusiast: he manifests a favorable attitude and is satisfied of the formative context;
- co-operator: he underlines positive and negative aspects of the lived formative experiences;
- detractor: he polarizes the negative attitude on the sterility and the shortage of relationships in the formative context;
- defeatist: he advances neither criticisms nor praises to the context and he doesn't look for stable contacts.
Items about the teacher features refer to 5 typologies:
- practical-reflexive: he is able to take and to elaborate the aspects of the organizational context and to report this as useful information for the intervention;
- wise: he considers as principal finality of the education the learning of the contents and their structuring;
- technical: he considers as principal finality of the education the learning of the abilities in their practical application;
- artist: gives importance to the creative and intuitive aspects of the learning;
- social actor: gives importance to the relational and interactive aspects (Houpert, 2005).

The open answers

The open answers allow us to get qualitative data that enrich the research models but are difficult to analyze unless we use inductive and a posteriori classifications (Giuliano, La Rocca, 2008).

We decided to investigate about efficient teaching practice representations through an inductive approach because literature does not provide us with unambiguous models to refer to: we refer to the detailed and technical investigation by Mc Ber (2000), as well as the well know study by T. Gordon.

Two open questions completed the questionnaire. Participants were asked to describe a complex teaching situation and the strategies used to solve it. Sixty selected answers were considered representative of the referral groups (beginners and experts) and semi-automatically analyzed with NVivo7 software through bottom-up code generation (Mugny, Carugati, 1989).

3. Results

4.1 The questionnaire about representations

A descriptive treatment of the data was carried out through the calculation of averages, standard diversion (σ) and standards scores (z) of the obtained values.

Furthermore, a variance analysis (ANOVA) is being carried out based on the comparison between the two groups of student-teachers features according to the data arose in the descriptive phase.

A considerable relation has been observed between beginners group and experts group figures about the items related to “average student” and “average teacher”.

The statistical comparison between the first and the second group of student-teacher presented a significant difference for all the items (p < 0.001). This is why we will now focus on the arisen differences.

- The “average student”

If we compare the answers about the items describing the “average student” we may realize that there’s a substantial similarity between the two groups about typologies cooperator and defeatist, (fig. 1): the typology cooperator appears most frequently in both groups – slightly more among the experts – and the typology defeatist appears less frequently in both groups – but always slightly more among the experts.

The interesting difference arises instead in the enthusiast and detractor typologies: the beginners group uses frequently the definition of enthusiast (second mostly used definition), while the experts use it less often (they use it the least).

An inversion can be observed even in the detractor typology that is very frequent among the beginners (the second mostly used), and a lot less used among the experts.
The “average teacher”

Comparing the answers about the items describing the “average teacher”, a clear difference between the two groups can be underlined about all the typologies (fig. 2).

While beginners consider more frequent the wise and artist typologies, experts consider practical-reflexive and social actor as predominant. These two typologies in particular have a totally different importance in the two groups: considerable among the experts – as anticipated – and totally low among the beginners.

We will furthermore focus on this after the analysis of the open answers.

4.2 The open answers

As we previously stated, years of experience are one of the features taken into consideration to generate codes. More categories have been created based on the context of use of key concepts (through the concordances analysis).

Let’s focus on the “coding families” (Glaser, Strauss, 1967) grouped under the codes practical-reflexive and social actor since they are significantly not consistent in relation to the structured items analysis.

Analyzed texts belonging to the experts subgroup show a wider presence of terms and expressions categorized under the code practical-reflexive and wise as well as terms referring to the code of social actor

4. Discussion

Some information, useful to the debate, may be obtained by cross-checking the data arose by the structured items with the open answers results.

In brief, we could consider that about the “idea of student” there are few differences between the beginners and
the experts, instead, about the “idea of teacher” there are a lot of considerable differences.

Among the experts student-teacher prevails:
- an image of a student who generally cooperates to the success of the learning activity but who often criticizes the teachers, his friends and his own job; He is also rarely enthusiast about the proposed activities;
- an image of a teacher as situation analyst who uses the relevant social context resources (colleagues, families, support staff etc.) to solve the deadlock.

Among the beginners student-teacher prevails instead:
- an image of a student who is always available to collaborate in the activities, very enthusiast of the proposed activities and scarcely disapproving the didactic situations he is part of;
- an image of a teacher who levers on his/her formal and personal knowledge and solves complex situations with intuition and sometimes “brilliance”.

Following the analysis of the open answers, however it is possible to make some corrections to this images of “average teacher”:
- among the experts, personal and theoretical knowledge stands out as a resource to solve controversial situations;
- among the beginners, the relevant social context stands out as a resource to solve such situations.

5. Conclusion

Compared to previous investigations about teachers representations carried out through questionnaire (Houpert, 2005) where the practical-reflexive typology prevails on the wise, this study made it possible to notice that such components - and the subsequent images - strictly depend on the involved student-teacher features, especially if open questions are taken into consideration.

Looking at personal descriptions, it has been possible to enrich the characteristics of the arisen representations based on the structured items of the questionnaire. We are hereby willing to remember that it has highlighted the wise component in the experts subgroup and the social actor one in the beginners subgroup. These data had not arisen beforehand.

Given the corpus representativeness (60 texts out of 300 student-teacher), evidence allows us to claim, in general, how useful quali-quantitative investigations are and to promote the use of text analysis as information source of the representations of the involved subjects.

The investigation provides us with more complex representations of the student-teacher. They are as well strictly connected to the specific local conditions. This suggests:
- further in-depth analysis in the didactics field to go further through the training biographies. They would highlight the preexisting knowledge foundation and the criteria taken into consideration by future teachers when approaching the profession, beyond the profiles indicated by the regulations and confirmed by the academy;
- more precise indications, as far as qualifying courses design is concerned. For example it could be useful to cross-check curriculum components (courses, laboratories and internships) more, through the narrative and reflexive training tools, to allow an effective encounter – and a fruitful mutual influence – between pedagogical tradition knowledge and experience knowledge (Gauthier, 1997; Damiano, 2007).

This will anyway depend more on a concrete and perceptive politics who will listen to the bottom up proposals than on the available resources.

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