THE KEY-ROLE OF TEACHERS WITHIN THE ITALIAN SCHOOL-WORK ALTERNATION PROGRAMS

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ABSTRACT: The EU through the flagship initiative "Youth on the move" promoted by *Europe 2020 Strategy* (European Commission2010), invites State Members to improve educational outcomes, at every level of education using an integrated approach, as a way to connect formal and informal learning, theory and practice, because only within the experience, can a theory find its vital and verifiable meaning (Dewey, 1916). The aim is not only to offer students opportunities to develop key competences, but also to reduce drop out. The Italian practice of School-Work Alternation (SWA) in secondary schools is a response to the European recommendation and part of Work-Related programs, whose aim is to integrate formal and informal approaches in order to develop students' soft skills, professional competences, and to allow them to live vocational guidance. This contribution presents the key-role of teachers as being responsible for the realization of SWA programs. The paper is part of a wider research effort and discusses the results of 14 interviews aimed at 7 teacher-tutors and 7 teacher–coordinators, in 7 different secondary school, (VET and general education), located in five Northern Italian regions.

The transformation that today characterizes society is caused by different phenomena: on one side the internationalization of markets, the new mass migration and the progressive development of national forms of state, towards new supranational and multiethnic configurations that are drawing a new geography of the world; on the other side the new technologies, the computerization that has created a radical revolution of space-time categories, moving from the continuous succession, as aspects of learning and of doing, to the discontinuous simultaneity dimension; we have passed from a linear world to a complex universe. The virtual world is becoming more a real world; therefore, new categories and new principles are supporting the knowledge. In this new perspective the linear passage from the possession of cognitive skills to that of professional and interpersonal skills is no longer a process able to rule the world and to help people orient themselves. In the complex world it is necessary to have luggage of knowledge as result of a simultaneous integration of cognitive, professional, and relational knowledge. Today we are observing the end of an instructional system where education and training, as two faces of the same coin, have lived for long time in a separated way and within an independent space. This transition from linear to complex paradigm breaks the systems' integrity, asking the educational system to change and to exploit the different kinds of learning and knowledge, within an integration capable of pollinating the knowledge, the relationships, the identities, and the learning contexts. The importance of introducing an integrated approach within the educational system and efficient partnerships between educational system and workplace is strongly suggested by the EU (European Parliament, 2000; European Commission, 2010) as a way not only to develop key

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competences useful to take part in the knowledge society, but also as a way to reduce drop out. In particular, within the strategy Europe 2020 a special space is dedicated to young peole with the flagship initiative "Youth on the move" with the aim of inviting the members States to improve young people's education and employability, by making education and training more relevant to young people's needs, by encouraging more of them to take advantage of EU grants to study or train in another country, or by simplifying the transition from education to work in every EU country. This attention to young people is due to the fact that over 5 million young people (under 25) are unemployed in the EU-28 area with the 23.2% of unemployment rate that is twice as high as the adult unemployment rate (9.0%), and 7.5 million young Europeans between 15 and 24 are Neither in Employment, nor in Education or Training (NEET).[2] The same necessity to create strong partnerships between the two systems is strongly supported by the Italian policies (D.Lgs. n. 77/2005; L. n. 107/2015); in fact, with the objective of overcoming the current crisis of learning, which unfortunately in Italy still recorded negative results referring to the drop out levels (17%), unemployment (21.7%), the presence of population NEET (29.3%) (Cedefop, 2014), since 2004, many programs of School-Work Alternation (SWA) are being implemented for secondary school students, as a way to integrate formal and informal learning, to connect theory and practice. If these programs until 2015 were implemented at the experimental level, with the most recent law on educational Italian system (L.n.107/2015) they become compulsory for all secondary schools: within vocational and technical pathways with 400 hours and within general education with 200 hours spent in workplaces, during the last three years of secondary school. SWA in this way becomes an integrated part of instructional and training pathways of every Italian student. From this perspective SWA is considered as a way to innovate didactics and school programs, in order to overcome the inability of traditional educational systems to create congruence between the formal learning and the real contexts' needs. It is that schools lack competence described clearly by Resnick (1987) through four elements of discontinuity between the formal and informal contexts: (a) while the school focuses on individual activities, the real contexts involve individuals within shared cognitive activities; (b) the school supports the thinking development only through mental activities, while the extra school activities include handling objects and experimenting practices; (c) the school nurtures symbolic thinking, while the situations require the ability to act a contextualized thinking; (d) even if the school promotes general skills development, external reality demands people with specific and situated skills.

All these considerations and the European Union recommendation can support educational institutions to reflect on the possibility of innovating didactics, teaching and learning methodologies, through their openness to external world in which students need to take part for their life.

At this point it is necessary to explain what is SWA within the Italian context. Its structure is similar to the international practices of Work-Related Learning (WRL) that "involves learning **F**or, **A**bout, and **T**hrough work." The acronym **FAT**, in fact, includes

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[2] http://ec.europa.eu/social/main.jsp?catId=950&langId=en

"planned activities that use the context of work to develop knowledge, skills and understanding useful in work, including learning through the experience of work, learning about work and working practices, and learning the skills for work" (Lucas, 2010, p.3). Its real development requires the creation of a continuous process of learning between class-based and work-based learning, supporting the transfer of learning between work and education contexts. SWA has the same characteristics of WRL, but it needs to be deeply known by its actors. It corresponds to a complex paradigm, because it is composed of two intertwined factors: (a) on one side it is a situated practice, where knowledge and learning are developed thanks to the participation within communities of practice with their cultural activities and relationships (Brown, Collins, & Duguid, 1989; Fabbri, 2007; Lave & Wenger, 1991; Rogoff, 1995), and where theory learnt by students within formal context can find its vital and verifiable meaning (Dewey, 1916); (b) on the other side it is the result of an efficient partnership (Engeström, Engeström, & Vähäaho, 1999) between formal contexts and workplaces, where all people involved need to cooperate in order to create a new shared space of learning (Tino & Fedeli, 2015). It is a place where the two contexts meet each other with their culture and their differences, creating a kind of *dialogization*; in fact, "Dialogue is not simply between people and languages, but within people and between the frames that people use to categorize experience" (Gutierrez, Rymes, & Larson, 1995, p.446). In this new scenario, ASL, if its actors try understanding its double nature, will be the space for creating intentionally opened systems useful for solving problems that can no longer be solved individually (William, 2002).

 This paper is supported by the Cultural Historical Activity Theory (CHAT) (Engeström, 2001) and focuses specifically on the key-role of some of its actors, teacher-tutors and teacher coordinators of ASL system, as important characters within ASL's partnerships, because they play the role of *boundary crossers* between the two systems.

Theoretical Framework

According to the Activity Theory of the third generation (Engeström, 2001) the interaction between systems can generate expansive learning through a cycle of collective transformation. It is a kind of change that requires the protagonists of systems to develop awareness of the following five principles that characterize the systems' nature: (a) the systems of activity are mediated by artifacts and are *goal oriented*; (b) every system has its traditions and its rules; it is composed of different people with different stories, therefore it is a *multifaced* and a *multivoiced* community where the same division of labor demands clarification and negotiation; (c) systems have their historicity, that needs to be known through their *rules, objects*, and *tools,* because they have shaped the systems' activity; (d) due to the nature of activity systems, within them there are a lot of differences and contradictions that generate disturbances and conflicts; it is exactly this phenomenon that can move the community forward a common vision and a collaborative effort in order to conceptualize the differences and promote the beginning of change and a wider horizon of possibilities of learning compared to the previous mode of the activity. This cycle of expansive transformation can be considered a collective journey through the *zone of proximal development (*Vygotsky 1934; 1978).

This awareness of the nature of systems can lead the actions of SWA key-actors for whom an efficient partnership demands involvement in a process made of two important elements: *policontestuality* and *boundary crossing* (Engeström, Engeström & Kärkkäinen, 1995). The first element helps not only students but also teacher-tutors and teacher-coordinators to take part in an active way of school and work contexts living different cultures, rules and traditions. In addition to their active involvement, they also serve as protagonists of the boundary crossing process helping teachers to leave their activity systems and to enter into unfamiliar boundaries, to gain more awareness of reasons for the whole boundary- crossing process, where SWA becomes the common *object* forward orienting the shared actions. To be protagonists of the boundary crossing process, it is supposed to mobilize interest, energy and creativity useful for creating boundary objects. It means that a real shared process of communication, monitoring and collaboration, needs to be intentionally built. The boundary crossing process is not a sufficient condition to promote learning within systems and for its actors, but a process of change and learning that demands the ability to create objects, tools, rules and shared activities (Kerosuo & Toiviainen, 2011). Therefore schools and workplaces to achieve an effective partnership, capable of generating expansive learning (Engeström, 2001), require an intentional cooperation, shared processes and objects that help systems to cross their boundaries.

Study Overview

This study is part of a wider research effort, whose objective is to identify the strengths and weaknesses of Italian School-Work Alternation programs. The collaboration of different school and workplace actors: teacher-tutors, teacher-coordinators, headmasters, teacher-committee, students, parents, tutors, and coordinators of SWA within workplaces has been very helpful. Specifically, the aim of this study is to investigate the key-role that teachers (tutors and coordinators) played within the Italian SWA programs.

Methodology

The context of research is the Northern part of Italy, where seven secondary schools of five different regions were selected from a rank of national list of schools that have implemented some SWA programs. They include four technical schools, one vocational school, two high schools (general education). The criteria of schools selection were: (a) the geographical area (different regions); (b) different kind of schools; (c) the highest rank score (from 88 to100) among the schools of the same region.

The methodology used during this specific study was a qualitative approach realized through fourteen semi structured interviews, an instrument that combines the flexibility demanded by the kind of the conversation, that allows the researchers to observe not only what they planned but also new elements, and the necessity to follow the draft interview as important condition to gather the information for the aim of the research. In summary, this kind of interview hast two specific advantages:, (a) the areas of investigation are defined in advance, allowing a systematic collection of data provided by the respondents; (b) its situational and conversational nature allows the interviewer and the interviewee to

feel comfortable (Cohen, Manion, & Morrison, 2011; Lucisano & Salerni, 2012).
The dimensions of the semi -structured interview addressed to seven teacher-tutors and seven teacher-coordinators of SWA programs of different schools involved, had the same structure and they focused on: tasks of teacher-tutors or coordinators, internal and external communication, students 'training project, realization of the experience, students' and teachers' learning, evaluation of the experience, strengths and weaknesses of SWA experiences.

Analysis of Data

After the first contact with the principal of each school from the beginning of the research, which started in 2014, a detailed plan for the interview was defined with the teacher tutor and coordinators of every school. The interviews presented in this specific study were conducted from May to December 2015 in the same schools where teachers usually work. Every interview, which lasted about one hour and half, after having received the participants' consent were audiotaped and transcribed verbatim as electronic documents. The content analysis of the electronic documents was conducted through the software Atlas.ti.07, whose feature is its flexibility; in fact, even if it was created according to the principles of *Grounded Theory* (Gibbs, 2008) according to inductive criteria that enable the emergence of analysis categories (*bottom up approach*), it also allows the use of a deductive approach (*top down*), in the case of analyzing the content according to theoretical categories. The prevalent approach in this study was the second one, but also the first one found space when important elements were retrieved.
The procedures used for the content analysis through Atlas.ti included the: (a) preparation of *Primary Documents (PD)*; (b) preparation of the *Hermeneutic Unit* (HU) as space for gathering *PD, pre-codes* and *codes*, *group-families* and *networks*; (c) labeling of different *quotations* through two functions: *open coding* and *add coding*; some codes from the previous coding list were often selected, in cases of similar meaning; (d) definition of code families by means of Code Manager in order to describe the identified new macro-area; (e) the graphic presentation as networks of the most meaningful code families with their categories. This last process allowed the researchers to have a useful map of all categories. The whole process of analysis generated 14 PD and 549 codes.

Results

The results obtained from the data analysis process offered important information about the key-role of teacher-tutors and teacher-coordinators within the process of SWA programs. The areas investigated will be presented one by one. The teachers involved within the SWA process as tutors or as coordinators have some relevant tasks connected to their specific role, but they have also common tasks, because generally the coordinators are also tutors. The most important tasks for a SWA coordinator are to lead and monitor all the SWA projects within his/her school, identify teacher-tutors for a class or a group of students, elaborate a precise report of the activities as evaluation of the experiences. Other common and important tasks for tutors and coordinators are related to the development of partnerships with local representatives of workplaces, the constant relationship with students' tutor-workplaces, the organization of SWA experiences, the

correct student-workplace matching, the monitoring of the whole experience, the preparation of all the documents for the school and the workplace as *mediating artifacts* (students' log, grid of monitoring, grid of evaluation filled by workplaces tutors, periodic reports on students' SWA experiences to the teachers council), the periodic personal visiting within workplaces in order to monitor the students 'activities. These kind of tasks show how these teachers need to be able to constantly cross boundaries of the two systems, school and workplace, becoming efficient *boundary crossers*. This is demonstrated by the required ability of communication: at the internal level with headmasters, colleagues for reporting and with students for monitoring the experience, and solving eventually emerged problems within workplaces; at external level with representatives of world of work and workplaces tutors, who should guarantee the involvement of the students within the work community of practices, giving students support and explanations about the learning activities, giving their feedback or evaluation on the students' experience to the teacher-tutors. The soul of SWA programs is the personalized training project that should be the most important *boundary object* of this partnership. In fact, it should be the synthesis of the whole process: the reciprocal knowledge of the systems with their cultures, their objectives, their traditions, their competences. Furthermore, it includes the clarification and the negotiation of the SWA objectives as a possibility to create a *boundary zone (*Konkola, Tuomi-Gröhn, Lambert, & Ludvigsen, 2007), free of traditional rules or preset activities. In this sense it should represent the space where every system is invited to reflect on itself and on its culture, in order to express then its creativity for promoting change. In reality from the data emerged the observation that this important aspect is almost completely managed by teacher-tutors, even if it should be the most important shared process within the school and among all teachers, and between the school and the workplaces. Another investigated dimension was the realization of SWA experiences that included the phases before, during and after the experience that students live within workplaces. Before this experience teacher-tutors plan in collaboration with tutor-workplaces the period of the year in which students will spend at least two weeks within workplaces; they have to guarantee that students have completed the training safety course, and the preparation of all documents useful for the monitoring and evaluation process of the experience. During students' SWA activities teacher-tutors have to personally monitor the experiences through visits to some workplaces. When students have completed their activities and come back to school teacher-tutors require them to report on the lived experience and their logs, which are useful documents for monitoring and evaluating the process. But what is the kind of learning for students and teachers from these experiences? The respondents emphasized that the SWA experience promoted in students not only soft and professional skills development, but also problem- solving abilities, foreign languages skills, and knowledge about world of work with its professional language and culture. They recognized that these kinds of partnerships also promote their professional and personal learning and training, because it is an opportunity to improve their teaching methods, and provides the opportunity to improve their relationship with students, and improve their competences as tutors.

The focus on the evaluation dimension highlighted the complexity of this aspect. Actually, it should be one of the most important *boundary objects* (Akkerman & Bakker,

2011) of this shared process, but it does not present an harmonic and systematic structure among and within schools. In fact, if within a community of practice there should be the *division of labor*, why is the evaluation process of SWA experience strongly managed by the internal tutor and only in part by external tutor or teachers' committee? The lack of *division of labor* was registered within schools, and between the two systems. In fact, the external tutors generally fill in the evaluation grid that teacher-tutors give them, but they do not participate in a sharing process of building *boundary objects* (grid of evaluation, definitions of competences at the end of students' experiences). At the same time, within the schools, even if the whole class committee should be actively involved within the evaluation process, only teachers-tutors and coordinators are those people who really monitor students' workplaces experience, who usually write the evaluation reports on SWA experiences. In writing the report they take account of workplace tutors' grid evaluation or oral feedback, and, in some schools, of students' logs, or students' questionnaires, or oral students' feedback. The class committee usually takes cognizance of what teacher-tutors and coordinators report, but it does not play an active role.

In all schools the most important evaluation *tool* is the students' final report on their global evaluation of SWA experience that included information on the workplace environment, their learning, their relationship,. Until now another weak point of SWA evaluation has been the lack of a shared formal recognition of the experience.

In addition to these weak points some others were emphasized by participants. The additional weak points included lack of economic and human resources, the lack of teachers' competences, the lack of time and flexibility within the educational Italian system, but also the lack of the SWA culture. Other weak aspects are related to the difficulty to develop a shared students' training projects with workplaces actors, to change teachers' culture, to enhance the relationship with the external contexts, or to ensure a good training for internal and external tutors. Despite these weaknesses, participants emphasized some important strengths of the SWA program, such as the increase of students' motivation, responsibility, and commitment; the improvement of teachers professionalism and communication skills with real outcome on the didactics; the enhancement of relationships between schools and the local territory, allowing schools to be part of the local contexts; the improvement of relationship between teachers and students, thanks to the possibility for tutors to be seen by students as facilitators of their learning within an informal context.

Conclusion

The relationship between the two systems (School and Work) requires the recognition of boundaries as characteristics of organizations, and at the same time, the boundary roles as possibilities to create links between organizations and external environments (Aldrich & Herker, 1977). The results presented here have shown that within SWA programs, as part of Italian educational system for students of secondary schools, teacher- tutors and teacher-coordinators, are the people who play this important boundary- crossing role. They represent the schools outside, who introduce the schools' students to the external environments and connect school life with work life, showing contents, using methods to link those to the external environments' needs. They are the key school- actors who navigate between internal and external boundaries, because they are managing the

internal and external communication processes. They are playing some important roles such as buffering, facilitating, mediating, filtering, and storing information for the future trying to enhance its social legitimacy. Besides the description of the key role of these teachers within the SWA programs, the aim of this study was to invite teachers and policy makers to reflect on the presence of boundary- crossing processes within these kind of programs, because they cannot be well realized without thinking or planning their double nature: as a situated learning experience (Cobb & Bowers, 1999; Lave & Wenger, 1991); as a partnership between systems that requires a formal recognition of boundary crossing process (Engeström et al., 1995; Engeström, 2001) and of boundary roles in order to think about appropriate training pathways for people involved in this process, and who must integrate very different objectives and requests of two different organizational systems, playing a dual professional identity (Richter, West, Van Dick, & Dawson, 2006).

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