Introduction to the Special Section. Educational Professions: New Challenges and Changes

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1. Educational Reforms and the 'Outside' of Education

This issue of IJSE presents some contributions reflecting on changes of educational professions, inside and outside the 'formal' educational field, as consequences of the deep reconfigurations that educational systems and institutions have witnessed during the last decades, since the '80s of the last century. Consequences provoked by the recurring economic crisis that widespread the more and more globalized ant intertwined economies, but also by social and cultural changes epoch-making such "expulsions" (Sassen, 2014) as migrations, new poverties and marginalization, jobs insecurity and so on, and the huge expansion of informational and communicational flows thanks to the acceleration and proliferation of both technological innovations and *Network Culture(s)* (Terranova, 2004).

The most striking transformation of education is undeniably the one 'irreversibly' affirmed by the end of the *golden age* of the *welfare state* at the turn of the 1970s-1980s with the irruption and consolidation of neoliberalist policies in the western economies with the privatisation of public services

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and/or their adoption of a managerialist logic (mainly through *New Public Management*). Subsequently, the emergence of a new *regime of truth* rooted on the paradigm of individualist economic action and the model of the enterprise, competition, risk, performance evaluation, performance-based salary, etc. became deployed as *dispositifs* of quality, efficiency, and accountability or, in other words, measures of the 'success' of educational organisations. Notwithstanding the diverse *path dependency* from cultural, ideological, and political legacies, the educational systems have converged toward a reconfigurations of the roles of the democratic States, and Governments, giving voice to what has been called the Evaluation State, diminishing the national dimension, and the territorial foundation of the State, together with its political function (Jessop, 2016), and mainly because of powerful influence deployed by inter and trans-national organisms and agencies, in a more and more invasive way (Mundy & al., 2016).

In order to understand the logic of these transformations, the conceptual doublet of "exogenous and endogenous" privatization is particularly useful. Investigating the exogenous one, i.e. the transfer of public services to private businesses, some researchers have investigated the ensemble of structural, political, and cultural factors, particularly focusing just on "ideational factors", otherwise defined as *soft*, such as paradigms and imaginaries, following *Cultural Political Economy* approach (Verger & al., 2016). In diverse geographical areas, and not only in the Western world, then, the following main factors have been acknowledged as in favour of the privatizing logic:

- Restructuring of the State's role (Ideological path in UK, Chile, and New Zealand);
- Diversification to promote choice (Nordic path in Scandinavia);
- Scaling up (Federal vouchers vs. State charter schools path especially in US);
- De facto (Spontaneity of *edupreneurs* in low-income countries path in sub-Saharian Africa as in Malawi, Nigeria, Kenya, Ghana; in southern Asia as India and Pakistan; and in Latin America in Peru);
- Public Private Partnership (Faith-based legacy path in Belgium, Holland, and Spain);
- Way of catastrophe (Exceptionality path – as for the Shock Capitalism – in Haiti, in Salvador, and New Orleans).

In particular, other researchers have depicted the general features of the *Global Education Reform Movement* (Adamson et al., 2016) as a political and ideological push to the exogenous privatization. Highlighting the most influential factors that distinguish the countries following the privatizing way, in contrast to the countries that count on public investments yet (comparing three couples of Western countries: Chile and Cuba in Latin America; Sweden and Finland in Europe; and lastly in North-America some States of the

United States and the Ontario territory in Canada), it is possible to identify these more important alternatives for the educational policies:

- Well-prepared teachers *versus* De-professionalized and under-payed teachers;
- Trust-based professional responsibility *versus* Test-based accountability;
- Whole-child curriculum and pedagogy *versus* Narrowing the curriculum;
- Universal access and equity *versus* Choice, competition and efficiency.

The first poles of every of these alternatives represent le distinctive features of the educational systems still continuing to rely on the public, and it is immediately clear how for the educational professions, as well as for the users-consumers, dramatically different destinies unfold. Even, though, in systems still privileging the public investment in education, the other side of the privatization, the "endogenous" one, deploy logics, methodologies and techniques derived from the private businesses in a very urgent, pressing, and conditioning way for the roles of the educational professions; the *NPM* discourse, in fact, could be considered more or less well established for the most developed western economies. A recent research (Gunter et al., 2016), e.g., ha compared ten European countries, investigating three dimensions of *NPM* in order to create in the public services sort of quasi-markets for promoting efficiency and quality through competition, accountability and competition: 1) State and institutions *legacies* and educational aims; 2) the discourse of *problematization* of the educational field (technologies, professions, curricula, evaluations processes); 3) the outcomes of the *NPM* introduction in terms of *unintended consequences* and *paradoxes*. Four peculiar models of NPM, then, have been depicted:

- Complementarity between exogenous and endogenous privatization (especially affirmed in the English model);
- Decentralization (the Nordic model split in three: a 'resisting' Finland, Sweden similar to the English model; and Norway in between);
- State resistances (the Napoleonic model and its contradictions, represented by the French State opposing both to NPM and privatizations; by Italy which is twenty years resisting to reforms of the public in a managerialist way, also thanks to teachers Unions; by Catalonia imbued by a public-private partnership legacy that has moved toward NPM reform as a way to enforce political autonomy against the Spanish State);
- Radical system transformation (the Post-communist puzzle, whereas Czech Republic Ceca, Hungary, and Romania trying to escape the socialist education State's legacies, combining and mixing up privatized and NPM settings).

Thus, the emerging scenario from the researches and the literature (nowadays huge) on privatization and managerialization of the public school, re-

gards evidently also the *Higher Education* sector, showing a great variety of policy *dispositifs* and solutions. The same nearly dominant regime of truth, paradoxically, has produced fragmentation, asymmetry, and inequality due to an encounter between an unmitigated demand and an increasingly segmented educational offer. Against «State Phobia» (Dean & Villadsen, 2016), most systems endeavoured to destroy the substantial isomorphism of school institutions and of universities, that had seen the emergence of places of education that were both different and in favour of diversity. These privatising policy *dispositif*, in fact, package new technologies (such as *e-learning*, digital governance, standardized texting, etc.), new truths (such as evaluations and its morality), and new "subjectification" (Biesta, 2017), that shake traditional professions (e.g. the educational leader), create new roles (e.g. the precarious teacher-researcher), and redefine the users as clients and entrepreneurs (e.g. the indebted student as entrepreneurs of herself).

Thus, the structural and disciplinary uniformity of educational systems and institutions is deeply modifying their nature by means of logics and policies of privatization that constitute new educational fields and organizations progressively hybridized between public and private. In such direction another powerful agent of change is more and more intervening, that of digital technologies, itself strictly linked to values and interests strangers to the traditional education field, and pressing from big and small enterprises, and then constituting another big sector of *edu-business*. The new digital technologies for education, both for the side of teaching-learning (Pitzalis et al., 2016) and the side of systemic and organizational governance (Landri, 2018), represent at the same time a challenge to legacies, routines, and disciplines of traditional and formal education, but even a forceful push toward hybridization between the formal and informal places of education thanks to the progressive permeability intrinsic to the digitalization of life itself, mainly through the *Social Network Sites* (SNS), and the algorithmic governing *dispositifs*, above all those of *datification.*

It is really meaningful how these processes of change that expand the *outside* of the education go well together with an 'optimistic' discourse on innovation technologies, able to contribute to exceed the viscosity and the obsolescence of professions, practices, and knowledge typical of the 'old' cultures of transmission grounded on printing/writing. Therefore, the traditional dyad of the teacher-student is substituted by a new mythology, the *net* able to nourish personalized and participative learning. The sense of emptying the identity/role of the teacher-professor in favour of other human actors and material agents has been recently and effectively in a work on *Platform society* by Van Dijck and colleagues:

> The changing role of teachers from classroom directors to dashboard controllers, mediated by numbers and analytical instruments, is a ma-

jor issue; professional may feel that the core of educational activities – assessment and personalized attention – gets outsourced to algorithms and engineers (Van Dijck et al., 2018, p.123).

Then the challenging digitization is presented as capable of combining the 'three issues of technology, innovation, and participatory network' and go beyond uniformity and disciplinarity of the mass education modelled on Fordist principles and *face-to-face* relations between teachers and students. Centrifugal educational scenarios recall the challenging imagine by Illich (1971) of a «de-schooling society», thanks to the contamination and the hybridisation of the educational environments with those of a wider social life and particularly the net, and nowadays the digital networks.

> Indeed, *networks have become a seemingly institutionalized utopia with unlimited ameliorative potential for education*, despite evidence of their negative capacity to catalyze disunity, disconnection, and dysfunctionality, and to reduce educational knowledge to marketable commodities, "soundbites," and populist user-generated knowledge (Williamson, 2013, 44; cm).

Thus, thanks also to the myth of such a decentralized and inter-net-connected education, the re-proposition of training, apprenticeship practice and climate, proxies to businesses culture, as ways to favour a culture of creativity, innovation, and flexibility, encourage processes of *learnification* (Biesta, 2017), whereas self-learning put teachers in position of marginalization as experts to monitor and support students. In this direction, as a main phenomenon where higher education is implicated, i.e. the *Massive Open Online Courses* (MOOC), these have been seen (Van Dijck & Poell, 2015) as identical to the SNS business model, at least for these three aspects:

- "Datafication as a Principle of Learning", in other terms privileging real-time, short-term processes of learning rather than education;
- "Algorithmic Selection and Reputational Rankings", whereas assessments happen instantly and continuously, mostly on the basis of perception or *likability*;
- "Commodification and Business Models", in which the "freemium" model transforms objects, activities, and ideas into tradable commodities.

Here, before discussing (also referring to the articles below) of the d-evaluation of the traditional teacher/professor and of the role played by digital technologies, we underline an aspect of the MOOC which is worth to be considered as more generally spreading the educational processes both inside and outside the formal institutions.

> The recent incorporation of MOOCs in higher education cannot be understood without taking into account two prerequisites: *the ubiquitous presence of social media in all facets of student life and the quick*

rise of online platforms as instruments of disruptive innovation (ivi 2675; cm).

What is at staking it is just the hybridization of the education (also for the adults if we think of the *Long-Life-Learning* discourse) and the overall social-life, in this almost perennial technological inter-connection. Social connectivity, in fact, offered and promoted as a value in itself, becomes a place for chances of formation, experiences of socialization, and subjectivation of themselves, as well as the educational functions requires: not only "individuals' ideas, values and tastes", but also information, knowledge and competences "are contagious and spread through human networks, [because] *these networks also affect what individuals do and think*" (Van Dijck, 2013, p.11). This is not the proper place to develop this dimension of the (never ending) formation of the life itself, even outside the formal education institutions, even if spaces of reflections unfold about:

- on the one side, the 'micro' dimension of the *human capital*, on which the individual is solicited to invest all the life long, which, just of because of the more and more knowledge embodied by the new technologies, implies a progressive shift from the formation of cognitive skills toward the so-called *soft* ones, that passing through the *Social and Emotive Competences* (SES) end up in involving the more general *character* of the individual (cfr. Benadusi & Molina, 2018);

- on the other side, the 'macro' changes of education in the reconfiguration of the cognitive capitalism as a "bio-cognitive capitalism" (Fumagalli, 2018), when all the vital faculties, as the communicative and relational ones typical of the "immaterial labour" (Lazzarato, 2015), are put to work even outside of production places, and also in the same diffused and digitalized sociality, whereas the boundaries between, work, education, and life in itself, contribute to the formation of sub-jectivities, and to the capture of a new "labour-power".

> Only in today's world, in the post-Ford era [...] can the notion of labour-power not be reduced (as it was at the time of Gramsci) to an aggregate of physical and mechanical attributes; now, instead, it encompasses within itself, and rightfully so, the "*life of the mind*".
> The characteristic aspects of the intellectuality of the masses, its identity, so to speak, cannot be found in relation to labour, but, above all, on the level of life forms, of cultural consumption, of linguistic [and educational] practices. Nevertheless, and this is the other side of the coin, just when production is no longer in any way the specific locus of the formation of identity, exactly at that point does it project itself into *every aspect of experience, subsuming linguistic competencies, ethical propensities, and the nuances of subjectivity* (Virno 2004, 81 and 108; cm).

In this direction, two articles of this issue, show very well as the interplay between the individual competences of the young should be profiled to cross the places of formation and of work (Chimenti & Licursi), and to favour a sort of re-territorialisation of education and identities (Merico, Crescenzo & Quarta). In order to favour these shifts of competeces between education, work and the other fields of the social life involved a complex assemblage of the micro and the macro dimensions are required. To be profitable, in fact, the investment in the wide fan of competences (even of the projecting of the life in itself and of the construction of new subjectivations) required by the arrangements of the bio-cognitive capitalism, some governmental 'meso' dispositifs, so to say, are needed for reconfiguring the educational institutions and professions involved (in enterprises, in schools, in universities, in counselling services, etc.), as for School-Work Alternance (an Italian policy case), and for Erasmus+/Youth in Action Programme (a European policy case).

These are only some starting points of reflections about the changes of governance and policy *dispositifs*, and of institutional and organizational assemblages that cause the reconfigurations of the educational professions inside and outside the formal education, and about the role played by the digital educational technologies, aspects that will be discussed below, after taking into considerations also some relevant gender issues.

2. On gender

Another important, emerging and central topic analysed in this *Special issues* collection is that of the gender relations in the field of education. It is an important question which has been tackled in international debates in the preceding decades, and has taken several expressions and forms: gender as gender inequality (Jacobs, 1996; Lorber, 2001; Sen, 2001; Buchmann, DiPrete & McDaniel, 2008), the gender pay gap (Holman, Stuart-Fox & Hauser, 2018; Various Autors – World Economic Forum, 2017); the gender as gender differences; gender as an area of tension within the theme of gender equality (Skelton, Francis & Smulyan, 2006; Stratigaki, 2005; Verloo, 2007; Stratigaki, 2005); gender as an area of social and cultural construction of gender (Butler, 1988; 2002).

In the field of education these themes are linked to other issues such as: equality and difference; long-term trends in terms of gender differences and gender equality (Subrahmanian, 2005; Skelton, Francis & Smulyan 2006; Bobbitt-Zeher, 2007; Breen et al., 2009; England, 2010); gender cultures in different contexts, the education of people about gender and the struggle against the gender stereotypes. These cultural issues affect the daily educational processes of young men and women and of teachers. They are directly

affected by the dramatic cultural changes which require school to take initiatives and be a driving force for promoting the gender rights and protecting the individual differences between young men and women.

In particular, some of the essays illustrated in this Special Section highlight two important aspects: *male gender* roles changes in the educational processes, and the education about *gender issues* in the primary schools, by overcoming concerns and stereotypes. The paper of Cristiana Ottaviano and Greta Persico, "*Educational Care: Male Teachers in Early Childhood Education*", is very important on this regard and it focuses on the relationship between caring for education and the male gender. The research deals with has been called "boy turn" in research on gender and education (Weaver-Hightower, 2003) and analyses the male teachers roles in the primary schools, typically considered places only for women. The authors illustrate a rich and comprehensive theoretical analysis. This was supported by an empirical study focused on the biographical approach and accounts by male teachers, working in the pre-school education. The research outlines the mens' lives which serve as models of those who work with childcare. The interviews presented make it possible to take a closer look at the reasons why men choose a job with duties often considered as "female". In this essay it is well shown how teachers construct and consider their job, and how they changed their self-perception in the micro and macro-social context. The study also underlines how these men, who work in the field of care services, challenge their typical "hegemonic" masculinity, by committing themselves to childcare despite the affects it has on their bodies, their emotions and their ability to develop new skills in a job which questions the gender roles prejudices in the field of education.

The second theme, which concerns educating people about gender identity, is dealt by Barbara Segatto and Anna Dal Ben, in their contribution *"Gender and Affectivity Awareness in Kindergarten: An Educational Pathway for Boys, Girls and Their Teachers"*. The essay focuses on the theme of educating about gender and on the way to free education from the gender stereotypes in some education systems, such as the Italian one in which there are few educational experiences about these themes. The research stresses the importance of spreading the gender themes also in the Kindergarten. The essay points out the findings of a training project involving 40 boys and girls that were 4 years old and their teachers in two municipal day-care institutions located in the north of Italy. The education process on the gender themes shows that boys and girls, who clearly distinguish between male and female gender, are very interested in working creatively on gender themes. The study also highlights a significant need for the teachers to do an additional training on these topics; indeed, teachers are interested in comprehending and contrasting the gender stereotypes in their educational practices.

3. Technologies, materiality and platforms

As we recalled above, in recent times, a deep interest has been focused on the technical materiality of education, a theme that invites people to consider objects, technologies, digital devices, virtual spaces as main characters in the field of educational practices and policies. Inside and outside school, students, teachers and educational institutions live in a world supported by many devices and complex technological infrastructures, which are drastically transforming the educational and institutional practices. The learning processes and the educational policy derive from all these assemblages which are defined *sociomaterial* (Orlikowski, 2010) and school is a world of sociomaterial assemblages that gather together heterogeneous elements (human and non-human materialities) (Fenwick & Edwards, 2010; Fenwick et al., 2011; Fenwick & Landri, 2012; Landri, 2014; Landri & Viteritti, 2016).

The analysis of these assemblages enables to examine the importance of two processes. On one side, the emerging of European and world settings of the *digital governance in education*, with the increasing pervasiveness of digital technologies that contribute to change and reshape the educational practices and the forms of process governance (Landri, 2018). On the other side, the emerging of local teaching practices that involve new *heterogeneous material orders between human and non-human* elements: all this setting has been totally reshaping the daily life of schools (Landri & Viteritti, 2016). Digitalization, digital technologies, platforms, technological devices are part of a wide world of new technological elements, which is radically transforming the field of education. Moreover, these phenomena are having an impact on contemporary societies by affecting institutions, economics, and social and cultural practices. They are complex and interconnected processes, which have gradually affected the institutional processes and modified the practices and the organization itself of many aspects of social life. We live in the so-called "platform society" (Van Dijck, 2018), which emphasizes the inextricable relations between online platforms, digital devices, structures and social processes. In this respect, the technological worlds not only reflect the social world changes but they also produce social structures and everyday practices. These changes are significant and require a new empirical research in the field of education in order to examine their effects overtime. The essays introduced in this special issue show both theoretical and empirical contributions to the study of these processes and a wide range of ongoing changes, covering areas such as policy, teaching practices and changes involving teacher expertise. These changes establish a significant and not entirely simple entanglement of the relationship between technologies and educational choices, of the relationship between guidance policies and technological devices, between the use of technologies and teaching practices,

between technologies and teaching skills, and between digital platforms and policy action.

In the paper by Marco Pitzalis and Antonietta De Feo, *"Micropolitics of school innovation: recruiting, mobilizing and converting teachers"* technologies are analysed as they were part of the local policy. More specifically, it may be observed the implementation of "Digital Agenda Plan" in Sardinia between 2012 and 2015. The theoretical approach used by Bourdieu combined with the concept of micro-politics introduced by Ball enables the authors to describe and analyse the mobilisation actions taken by the teachers. They are identified through three emerging dimensions: *conversion*, implying the acceptance of an ensemble of beliefs; *mobilisation*, implying the commitment to collective or organizational actions; *materiality*, implying a new material order that conveys a new logic of things. In the same view, the work of Emanuela Spanò and Danilo Taglietti *"Disentangling the National Plan for Digital School: the micro-dispositivity of the Futura event"* focuses on the analysis of ministerial action plan supported by a digital platform which has been defined by the authors as «micro-dispositif of power». Through dimensions of space, time, technologies and subjectivity, this platform enables to see how the endogenous privatization of the Italian educational system is being developed. This happens by using digital technologies and thanks to the help of a platform, which complements the training strategy of Digital School National Plan and contains resources that can help school to organize the activities.

The paper, entitled "*Technological mediations, lifelong guidance and the reshaping of the teaching profession"* written by Antonietta De Feo, Catarina Gonçalves and Marco Romito, focuses on the case of SORPRENDO software, developed by a private company, which supports the schools and families for the educational choices of students. The authors highlight how the teachers and the schools are incorporated in the logic of the platform, which is not a neutral tool. Teachers and the institutional cultures are therefore absorbed and spread into visions delivered by technology and its content. The paper of Luca Salmieri entitled *"The rhetoric of digitalization in Italian educational policies: situating reception among digitally skilled teachers"* focuses on the analysis of the teachers' digital skills. The author presents and discusses findings from qualitative research on the Italian reception of the European Framework for the Digital Competence. The paper also shows interesting observations to examine this phenomenon, which affects digital rhetoric and the authentic skills. The paper by Maria Carmela Catone and Paolo Diana entitled "*Expansion and reconfiguration of the action of the university teacher in relation to TIC: a qualitative analysis*" highlights the university teaching practices supported by TIC system. The analysis of a case study carried out in a University in the south of Italy shows the adaptation and learning pro-

cesses of the university professors who have been always interested in more digitalization processes of teaching methods. In the article, it is possible to observe how the digital support, experimented and followed by researches overtime leads to interesting changes in the university teaching practice.

In conclusion, we can say that the technologies, the devices and the platforms are not neutral tools. They are *sociomaterial objects* that inscribe, values, moral order and cultural policies, and in the papers here presented these aspects are particularly important.

4. Teachers: the actors shaping macro-policies at the micro level

The articles published in this special issue confirm the crucial role played by teachers in shaping the education system and its changes. Differently from mainstream literature, the following papers do not focus on teachers' effectiveness and aimed at analysing which teachers' behaviours positively affect student performance (Hattie, 2003; Hanushek & Rivkin, 2006; Argentin, 2018). From a policy perspective, the crucial topic faced in the following articles seems to be the role of teachers when they are involved in interventions, hence playing the role of policy implementers. Analysing digital innovations, several contributors to this special issue focus their attentions on the role played by teachers involved in ICT interventions within schools. It is quite interesting observing that, from different perspectives and investigating heterogeneous initiatives, several authors come to a similar conclusion: teachers involved in digital innovations adapt the programs, tools and instructions offered to them, tuning these devices to their specific school context and – even more relevant - accordingly to their preferences. These convergent results clearly show the crucial role played by teachers in implementing policies and managing (instead of being managed by) them. These results should be took into account more seriously from authors claiming that there are hegemonic views about the role of the education system at institutional level (especially among international organizations) and that these views deeply influence schools and teacher through policies. Indeed, these (supposed hegemonic) policies seem definitely far from being linearly, fully and docilely adopted by teachers, who are moved instead by other drivers. As an example, in the following papers of the issue, it is possible to identify statements coming from teachers passionate about implementing the proposed digital innovations and aimed at using widely in their classes the suggested digital tools. Nonetheless, other quotations are much more frequent: the ones from teachers who are cautiously introducing some elements of the digital interventions in their classes, choosing them and tuning their implementation to the context where they teach; other interesting quotations are the ones from

teachers manifesting doubts, scepticism or critics towards the proposed innovations. It is clear that technological devices and interventions' designs are not value-free (indeed they are soaked with values and normative views), nonetheless this fact is well known not only among sociologists, but also among teachers themselves. Probably, teachers (at least partially) lack the theoretical keys held by sociologists of education to interpret the ideological contents nested within digital interventions, but they are helped in identifying these contents by the fact that they are called to implement interventions in everyday school life and to adapt their use to specific goals. Teachers' "domestication" of technological device in schools (Pitzalis, 2016) seems not only the consequence of their skills, cultures and contexts, but also the result of their awareness about interventions' (explicit and hidden) ideological contents. The supposed "re-subjectivation of scholastic professionalism" with a shift of teachers' identity from magister to facilitator - analysed by Spanò and Taglietti - may be clearly identified in events explicitly aimed at promoting digital innovation in schools, such as Futura ("*Disentangling PNSD: the micro-dispositivity of the Futura event*"). Nonetheless, there is still a wide gap between the promotional claims delivered in this sort of events and the implementation of related behaviours and practices in the classes. For example, Pitzalis and De Feo's in their article *"Micropolitics of school innovation: recruiting, mobilizing and converting teachers"* remember the heterogeneity of teachers' careers and link this source of variation to teachers' mobilization for digital innovations, showing a distance between aims of digital interventions, on one side, and teachers' interests on the other. At the same time, also the lack of (minimal) common definitions among teachers on key concepts underlying digital innovation, a topic at the centre of Salmieri's contribution *"The Rhetoric of Digitalization in Italian Educational Policies: Situating Reception among Digitally Skilled Teachers"*, reinforces the idea that heterogeneity of views and practices is the rule among teachers (Cavalli, 2000). Another source of variation in teachers' adaptation of innovative interventions is incorporated in the research design of De Feo, Romito and Goncalves's essay *"Technological mediations, lifelong guidance and the reshaping of the teaching profession"*. In this article, authors compare the implementation of the same guidance digital tool in two different school settings: an academic track in an upper class area of Milan towards a technical-vocational school in a working class area of Cagliari. Differences among schools lead teachers to implement differently innovations in the context where they operate.

Another source of variation in the way teachers adopt ICT innovations and devices should be reminded, being only slightly analysed in the papers presented in this special issue, namely the school grade. Catone and Diana

focus on university in their article *"Expansion and reconfiguration of the action of the university teacher in relation to ICT: a qualitative analysis"*. In this case, it emerges that the use of ICT in an e-learning environment allowed professors to reflect on their teaching practices. In this case, digital innovation such as e-learning, drive professors to experiment new forms of didactics and to re-organize their role of teaching, taking the distance from being a mere source of knowledge transmission. This is an interesting result, considering the usual low attention paid to didactics by academics in Italian universities. This evidence reminds that digital innovations are indeed also an opportunity for promoting active reflectivity among teachers, not only a set of ideological devices passively incorporated by teachers in their daily routine. Overall, several factors enhance heterogeneous answers from teacher to innovations occurring in their schools.

It is also necessary to underline that this huge amount of heterogeneity was detects by authors, despite their papers focussed on the limited subsample of teachers who decided to participate to the investigated interventions/programs. One example seems emblematic to support the idea that heterogeneity is striking, even among a selected subpopulation of teachers: the ones interviewed by Salmieri lack common definitions of digitals kills, despite being equated by the fact of sharing the role of "digital entertainers", meaning that they experienced previous ad hoc training on digital tools and a common set of digital tasks in the schools.

It must be further underlined that this conspicuous amount of heterogeneity was observed despite another crucial source of variation was under-represented in all the articles presented in the issue. We refer to the fact that the articles considered only marginally the views, values and behaviours of teachers who decided to not participate to the interventions described in the essays. Considering the additional group of not-participants and exploring their views, resistances and critics to innovations would probably reinforce our conclusions: despite the wide diffusion of digital technologies and related interventions and despite their (implicit and explicit) views about educations aims, there is still extremely high heterogeneity in the way they are adopted and implemented in the classes.

Summing up, the micro variations in implementation of macro interventions seems to ensure spaces for pluralism and reflexivity for teachers and allow them to preserve crucial component of education from the political discourses and related interventions. The alarming views stressing the cross-national hegemonic pressures on education, frequently present in sociological literature and recalled also by several articles presented in this special issue, seem to be mitigated by the analysis of what happens at micro-level, when policies are implemented in classes.

An additional learning may derive by the evidence presented in this special issue and seems particularly useful for evaluators of education policies: it is necessary to keep in mind the pivotal role played by teachers skills, values, cultures, settings, daily routine and constraints when a intervention is delivered in schools. Teachers are an extraordinary powerful filter for the implementation of any intervention and for shifting it from one direction to another: the role of "street level bureaucracy" should not be underestimated (Lipsky, 1980). Hence, teachers' mobilization is not enough, since it may be shallow or not in line with the interventions' aims: any innovation occurring within schools need to have teachers highly motivated and accurately prepared to implement it in order to have the chance to succeed, as already noted above. This is particularly evident reading the article *"If the work is doing research? As building School-Work Alternance paths in the University: reflections from a case study",* analysing the implementation of School-Work Alternance (SWA), mandatory in Italy since 2015, consequently to an abrupt reform of the school system (Argentin & Barone, 2016). In this case, low attention to teachers' engagement and to implementation issues related to mandatory SWA lead to a situation where schools' aim was students placement in hosting institutions, not even worrying to establish a proper dialogue in the projects' definition phase. Clearly, the consequence of this fact was that both students and teachers developed the perception of being engaged in meaningless activities and therefore acted complying to the SWA bureaucratically. Fighting this weak start required additional efforts from hosting institutions, in order to develop properly SWA projects.

On the other side, when looking at innovations occurring in the field of education, it must be reminded that schools tend to be self-referential bureaucratic organizations. On one side, it is correct underlying that digitalization and related interventions are soaked of visions about the role of school and promote specific professional identities of teachers and that – very frequently - digitalization is still promoted as a solution to several school issues and it is presented as an easy way to achieve positive impacts on student performance. On the other side, while questioning these normative and ideological perspectives, one should not forget the fact that digital skills indeed are crucial for young generations, deeply involved in on-line activities in their everyday life (Gui, 2014). At the same time, it is also necessary to remember that teachers, engaged in the challenging task of preserving and transmitting knowledge between generations, may be reluctant to abandon consolidated knowledge in favour of new topics and skills or may simply be scared by the idea of changing their professionals' practices introducing new behaviours in their daily routine. Innovative interventions may be a leverage to mobilize teachers and to convince them to be engaged in new tasks relevant for their students. Along this reflection, another article in the special

issue is helpful in reminding us that schools are only one of the sources of learning and skill development for nowadays students, among many others. Merico, Crescenzo and Quarta, in their article *"Training, recognition and professionalization of youth workers in Italy: the contribution of Erasmus+/Youth in Action"* show the role played by the European (and international) dimension for young people, perceived as "the (only) framework (perceived as) capable of giving meaning and perspective to their experience", remind us that there are other actors in the field of education beyond teachers and formal education, and that these educators are forced to face difficult trajectories, in order to acquire recognition of their professional identity.

All the articles considered up to this point share a focus on innovation as a process explicitly planned and implemented by policy makers, teachers or educators. We must consider another source of innovation for education environments, the one deriving bottom-up from not frequent individual pathways: there is a high potential of change in this uncommon trajectories. In example, as shown by Ottaviano and Persico *("Educational Care: Male Teachers in Early Childhood Education"*), male teachers in early childhood education move beyond "gender cages" and contribute to the change of the micro and the macro social context. Focussing on gender issues, also Segatto and Dal Ben clearly show the high potential of changing social norms detained by teachers and educators collaborating with them. In their article "*Gender and Affectivity Awareness in Kindergarten: an Educational Pathway for Boys, Girls and Their Teachers*" these authors analyse an innovative teaching experiences on gender equality. Their intervention reveals that teachers need to be supported in understanding and deconstructing gender stereotypes, but also reminds us that schools are places of socialisation and of identity construction, hence settings allowing the opportunity to effectively promote social change among young generations.

Overall, when considering the articles presented in this special issue from the perspective of teachers, it emerges that these actors play a crucial role in mediating between macro-innovations and policy discourses and micro-interaction in classes. Teachers contribute to the shaping of social change in two directions: on one side, preserving the stability of school environment from external pressures to respond to the constantly changing requests coming from market, policy makers and social trends; on the other side, being themselves promoters of innovations that, conveniently filtered and adapted, change school settings, teachers themselves and their communities.

5. Notes on research methods

Sideways, it is interesting to detect two methodological features characterizing several studies collected in this special issue: a. the majority of the

articles focusses on case studies and investigate social processes taking place during the implementation of policy interventions; b. coherently with these research contexts, authors largely recur to mixed methods and, more precisely, privilege qualitative techniques, while developing their case studies.

It must be noticed that these methodological choices are not neutral for the results that researchers reach. First of all, the well know (and quoted by some authors) lack of external validity of qualitative research is a problem for the studies presented in the following page. The problem seems even more severe than usual, due to the fact that many articles involved only the specific and selected subpopulation of participants to interventions. Self-selection into the intervention - namely the choice to take part to the policy, a process occurring at school and/or teacher level in educational setting - and selection of participants – namely the prerequisite required to schools and teachers in order to benefit of a program – strongly limit the possibility to extend the interpretation of results beyond the observed cases. It seems that this severe limit need to be taken more seriously into account by future investigations. A viable solution may be integrating the analyses on participants – such as the ones delivered in many articles of this special issue – with additional analyses on processes leading schools, teachers and young people to take part to specific programs. Indeed, comparing evidence emerged on participants to an intervention and evidence regarding not participants may be helpful. This comparison should help researchers to understand how far results on policies' beneficiaries may be extended to not-participants, but there is also a second advantage. Evidence on individuals and institutions who decided to not participate to interventions may be useful in order to avoid the risk of overestimating the relevance of dominant views in education and the risk of not describing adequately forms of resistance and opposition to it. Finally, a third advantage may derive from considering a subsample of not participants, namely teachers and schools not informed about the investigated policy or simply not interested in it, hence not reached by interventions. This subsample of the population, usually neglected by researchers, may provide hints about the target of interventions effectively reached and exposed to their ideological views and the processes through which programs diffusion takes place.

A last brief consideration emerges, considering the articles' frequent focus on interventions and policies: the community of sociologists of education seem ready to interact deeply and effectively with policy evaluators, largely beyond what already happens. The investigation of social mechanisms and networks activated by policies is already a common ground of research for these academic communities. Both sociology and evaluation may take advantage from cross-contamination.

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