INNOVATION AND TEACHERS' IN SERVICE EDUCATION: THE CULTURE BASED APPROACH

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Abstract

In the text presented below the two key words: innovation and teachers' in-service education are structured in terms of relationship and are included in the current global scenario that sees not just Italian, but each school in any foreign country committed to interface with new and complex problems. It is also argued the implications of them, on an application field, where the theoretical and praxical dimensions receive mediation and which supports the suggestion of a cultural approach to the teachers' in-service education.

Keywords: In service education, innovation, school improvement, culture, organization

Introduction

While innovation is on one hand fully defined by the dictionary of the Italian language Devoto-Oli, as "*the introduction of new systems and criteria*", as well as the "*improvement and / or the radical change of the goods offered*" or as "*the improvement or radical change concerning the system, the means of production/performance, or the organization of production*", on the other Cros and Adamczewski (1996) and Cros (2001) argue that the word innovation cannot be confined within a linguistic chain which is depriving it of its magic power, ambiguity on which its appeal is based." A.M. Huberman (1973) has got the same opinion and believes that the term is "*seductive and deceptive*", since while evoking the improvement and progress, at a closer look, it indicates only the introduction of something new and different, without any explicit positive connotation.

However, beyond the etymological meaning of the word, we can agree that it is a complex concept of difficult determination - which points out the process of selection, organization, creative use and improvement, in terms of some perfectibility of human resources and materials, according to unknown methods that allow to achieve, with a greater level of effectiveness, the objectives an organization has set -

that can be examined from a plurality of perspectives, each of which highlights and emphasizes the different elements that are included in the term. These are, as a matter of fact, points of view pertaining to various sciences. To name a few of them: Anthropology Psychology, Sociology, Sciences of Education.

Arguably, the main semantic spheres intersected by the concept of innovation correspond to the themes of the new, of change, of process and action, all to be inserted inside a system made of a complex whole of factors. Primarily those inherent the phenomenon of innovation such as: quality, cost, complexity, communicability, and secondly those variables depending on the specific situation: such as the structure of the education system in which innovation will be embedded the direction and the initiative (often based on the prestige of those who suggest it), the institutional environment which is a constitutive part of the school environment (the moments of crisis and dissatisfaction are generally the most favorable to it), the rules according to which a group is formed and works, the personal characteristics of those who will adopt it (motivation, willingness to take risks, possible resistance) and finally, the variables related to the environment such as the compatibility of innovation with the school system and the ability of the latter to welcome it.

But if we can speak of innovation, on what terms? How we might refer to this so complex semantic universe, and combine it with the texture of that micro systemic organization that we call school? With reference to the place where intentional processes of teaching and education are played, we could decline the term innovation, at least, in four possible meanings. Each, in turn, constitutes its privileged areas: teaching methods, profession, evaluation and organization, without, however, separating them, but striving for their integration, being aware that one is pervading the other, that is to say each admits the presence of the others.

If innovation, by definition, implies a transformation, the four identified fields where it runs are also subject to variation, since, the paradigms of reference are also changed. First, the notion of knowledge that, according to a constructivist perspective, considers the human being in the process of understanding not separated from the context where he plays the role of an actor, in conjunction with other social actors with whom he builds knowledge - in phenomenological terms, as a conscious intentional act, toward cognitive objects. This act also develops as a hermeneutic action , being aimed to interpret events and reality. Therefore a revision of the way of conceiving knowledge and the objects that give shape to it, i.e. the disciplines, follows. They are no longer represented as linear sequences and in relations of contiguity, but conceived as open universes, interposed, constantly updated and in everlasting connections. While maintaining their own epistemic peculiarities and contents, whose value lie in giving names, order and classify the human experience, they endow the human being of lenses to explore complexity, whose approach admits neither simplifications nor reductions (Morin, 1985). In this sense, disciplines represent methods of inquiry through which one can assume full awareness of problematic situations, to be posed and solved, by the use of abductive processes,

expression of the human being's poiesis and, according to Pierce "unique forms of reasoning" that can enhance our knowledge.

Also the context in which these paradigms take shape is changed: the global village where the chance of access to information as for the community and different cultures is made possible thanks to the enormous potential of technological tools that science and progress have set for the benefit of people. Globalization, a well known reference, and that is now obvious and taken for granted in our ordinary language, having been embrained even in our cultural heritage, has not only invested financial markets, economy, the labour market, but the same social structures, modifying them in the name of an alleged homogenization of cultures that blurs the specificity, extends the communities, making them a unique whole, dissociates man from his primary social solidarity, allowing him to join largest and widespread species and entities, making him free to choose his proper relations in the world.

Some revisions of the human behavior, therefore action, feelings and so on, should be matched with those paradigms and not only teaching methods or the evaluation process or the same organization, but also some professional features i.e. that sort of professionalism that is gained when a practitioner creates bridges, weaves relationships at an extended level - not only in his/her school, but with the whole external environment and with each stakeholder.

Innovation and change

Innovation actually entails deliberate choices, strengthened by relational and inter subjective processes. It will be implemented by specific behaviors adopted by the actors within an organization, accompanied by reflection on the meaning attributed to their actions and the consequences that will follow. Anyone who is able to innovate, in fact, decides to introduce some changes in his/her practice inspiring it, more or less explicitly, to precise values.

Despite of its outcome, every innovation takes shape from a desire to improve the situation. But if material changes are more easily conceivable - even if only in appearance - such as the new usage of a laboratory, the adoption of a new textbook, the use of specific multimedia tools, those concerning any conceptual, cognitive educational variation are quite different and longer to happen, as for example those more properly related to the learning-teaching field. It is the case of any teacher at the very beginning of the school year but even during the school terms who is called to face with the ecological review of some subject contents. This ability is expressed and trained whenever he/she chooses that essential knowledge to define the subject he/she is going to teach, whose topics are perceived as fundamental in developing the "deep process of understanding". This kind of task is to tell the truth more aimed at teaching the method of the discipline, rather than its contents. And again, the case of any professional teacher who having acquired the concept of core competencies, and today more than ever, those of active citizenship, suggests new ways of authentic teaching, based on tasks of reality, and on a different process of assessment and evaluation, not merely "of" learning but, first of all, "for" learning.

Other than materials changes, as a matter of fact, are those which involve processes, even those relationships between all the actors within the school organization and outside it. However, while - and it is easier to understand - the changes of the first type are the easiest to be implemented: innovation based solely on the introduction of new materials is certainly destined to spread more quickly – they are known as "*incremental changes*" - those of the second type, more properly related to the processes and significant variations – they are called in the scientific literature "*substantial change or transformation or turnaround*" - are of difficult occurrence and implementation. The incremental changes (Elmore, 2004; Fullan, 2004) as such, aimed to playback practices already known by professionals, lap just certain aspects of the organizational life and, if determined by exogenous forces imply a mere adaptive response of the system to unanticipated disturbances that originate from the external environment. In addition, when the talk focuses on organizational innovation, it is feasible to recognize not a cultural transformation in the *reengineering* process that touches the structure and functions of the operators of the school, more and more specialized and differentiated, just a sort of change, as if any school reflected in a mirror would reproduce the differentiation of the external environment (Ashby, 1958, Lawrence and Lorsch, 1967).

This process, however, is not even born from the need felt by schools themselves, but drawn from a techno-structure which, speaking with the words used by Mintzberg (1983) is configured closer to the strategic apex, actually far from the core operating basis where teachers find their proper place. This let us imagine a kind of change neither responsive or anticipatory, as it is not meant to anticipate, predict the macro system's stresses and stimuli, nor able to read the turbulence in a critical way, therefore unable to reprocess and return it converted into potential suggestions that other systems might consider to provide, in turn, as coherent responses. Finally, anticipating also means living the transformation, being actors in it and not to be overcome by change; living the complexity with no passive resignation or be overwhelmed by it.

Moreover, the change, the radical one, cannot be considered an exceptional event, something that happens (March, 1981), which puts organizations in a state of crisis, a sort of "strategic drift" (Johnson, 1992). Transformation is physiological in the organizational development (Rebora, 2001) and deeply rooted in the life of the organizations themselves. The notion of the development is reminiscent of evolutionary progression and improvement. But if any organizational development includes several stages or phases of growth, such as those outlined by Schein (1999) i.e. juvenile, mature, and old age in each of which the organization responds to external stimuli, according to the culture developed at its core, then school and, particularly the secondary level seems to have been living for a long time the state of senility, incapable as it is , to acquire a different shape, of changing radically its perspective, starting with a new vision that will lead it to a redefinition of its cultural priorities. Following an evolutionary perspective change is even incremental because

although the interactions between environment and organization find an element of mediation in the organizational routines (Nelson and Winter, 1982), these will tend to restore the state of internal coherence or a "ruled local system" (Normann, 1978)), initially deranged.

Rather than actual transformations we could then speak of "continuous oscillations" (Ferrante and Zan, 1994) between states of inertia and dynamism which occurs when a *trigger event* happens, i.e. an event considered to be critical, because it is capable to challenge the *status quo*. But the tendency of the system to rebalance its inner state is far superior to its ability of a radical reshaping by putting into discussion not only how to do something, the procedures, but the reasons why something is performed in a certain way.

In service education and transformation

Organizational development implies a profound change, a cultural one. Using Ackerman's perspective (1982) for our purposes, we could claim that transformational change is possible in school, provided that it starts from a desired and shared cultural revision of the organization that gradually becomes a sort of *reculturing* (Fullan, 2004; Angeloni, 2008) as well as from a revision of its actors' cognitive models, practices and operational aspects related to the service. The "quantum leap" or *turnaround* (Schendel, 1976; Hofer, 1980) that is both strategic, operational and structural can be also applied to the whole organization transformative process, but it needs a catalyst: an organizational culture, not conceived as a barrier erected to protect oneself from those people who belong to the complex human artifact, rather able to institutionalize the transformative process in its core, tacit assumptions and beliefs. It is true that such a process here described implies on one hand to un-learn beliefs, values, attitudes and on the other learning something new. It makes the human being anxious for surviving and for learning.

The first type of anxiety has a lot to do with the conservation of the species and of the group. The anxiety for learning, instead, causes in people individually and in those who form the organizational group feelings of inadequacy, frustration, incompetence, loss of personal identity and group membership. Therefore, in this case to learn could mean missing something. To tell the truth, when a school organization develops its distinctive culture, it learns how to respond to problems of internal integration and external adaptation. Thus, practices, values, basic assumptions are answers that people in a community "invent, discover, develop" as solutions to these problems. In case the processed and evidence based assumptions are effective, they are taught, socialized, so shared, to the new members "*as the correct way to perceive, think and feel in relation to those problems*". Culture has a pragmatic character, since values, assumptions, and artifacts are consistent only if they revealed successful. They will actually change when they become rather ineffective to the solution of problematic situations relevant to the organizational development.

Culture thus implies learning which, in other terms, is equivalent to transformation. Learning involves the acquisition of habits, knowledge, attitudes, and

enables people to adapt themselves to social, as well as personal contexts. Any change in behavior indicates that learning is taking place or had already taken place (Crow and Crow, 1963). When, in addition to new forms of behavior, practitioners are also able to give birth to new procedures and outcomes, thanks to new ideas gained from learning, then the learning process becomes primarily a cognitive process of redefinition not an episodic one, but the very *conditio sine qua non* for the organization to deal with the unexpected. "*Organizations are transformed when they establish mechanisms of learning in everyday organizational life*."[1] Reshaping themselves cognitively for schools and for all other organizations means make a specific diagnosis of their culture, pointing out their strengths and weaknesses, including primarily those forces which are opposed to the process, having decided previously to "*unfreeze*" what has been learned, in substance that way of seeing, feeling and behaving that led to nurture that culture and that gender identity in the institution for long, but that, in the light of new problematic events, is necessary to revise.

The cultural paradigm which by definition is a dynamic model is learned, shared and modified (Schein, 1999). Culture is then the product of social learning, of group sharing: an organizational group that, having passed through the circle of tacit knowledge has transformed it into the main topic of negotiation and revision. Culture that is fed by the organizational actors' repertoire of knowledge and experience and that lies in a constant two-sided process of education t is a source of disconfirmation, but it is also an opportunity for renewal. A school that makes knowledge sharing a cultural value (Fullan and Stiegelbauer, 2001; Fullan, 2003) is an organization that takes the shape of a professional learning community (Louis and Kruse, 1995). It does not fear change, but learns from mistakes, errors, conflicts and whose strengths are interactions and sensitive exchange.

For a long time the word education has been misinterpreted as a synonym of training, left to the initiative and the willingness of some "good" teachers. The two terms have got different language connotations as well as some relevant conceptual differences. Glaser (1962) and Nadler (1970) suggest a significant differentiation between the two semantic universes. Glaser considers training as an activity planned for specific objectives, closely related to the role or function performed in the workplace. Education, on the contrary, is targeted to broader goals. Nadler calls training, any event that has as its primary objective the improvement of the performance in the workplace. Its purpose is to introduce a new behavior on the job or to change a previous behavior. Education, so called by the same author consists in a series of activities underlying the development of human resources, set to improve the overall competence, and therefore also the employee's personality.

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[1] M Fullan, *Leading in a culture of change*, Jossey-Bass, S.Francisco, 2004, p.195.

While training is thus related to the improvement of his/her knowledge and skills, as far as the latest information and updated news regards, with reference to a professional area or field, such as the methodological, institutional and disciplinary field for teachers, education is a process which, without excluding the same features, is more comprehensive and diverse. The topic or core of the educational process is neither the information per se, nor a behavior to be changed or enhanced, but the person himself/herself or better, in terms of organization, the whole organization and the people who constitute it and keep it in life. Among other things, training can produce for sure expertise, intended as technical ability, as for teachers in our case; nevertheless it recalls the image of a machine - organization , a system whose functioning is subdued to the rules of the efficiency, being affected by obsessive planning times, activities, more or less "scientific" ways to go on.

Education, as the other part of the coin, refers to an organization perceived as a living artifact, as "*brain*", "*culture*", "*flow and becoming*," where its actors collectively know how to reinterpret their world, redefining activities by introducing new forms of mediation. The suggestion of a new teachers' in-service education approach hereafter named "cultural" (Angeloni, 2008) comes from the need to create well defined organizational identities, which are accountable in directing their choices, i.e. not on the basis of fashion or improvisation, but carefully and thoughtfully.

The Culture Based Approach: suggestions and conclusions

The *Culture Based Approach* starting from the concept of institution sees schools as entities endowed with their own distinctive features and traits that distinguish their substantive aspects and define them as cultural phenomena in change.

The organizational culture of schools will be the main subject of the educational process that is in its turn a transformation process, being, at the same time, its pivotal means and goal. The teacher- adult's experience will be therefore on one hand the starting point, the object on which the reflection can be elicited, in relation to situations felt as problematic by teachers themselves and related to both the complexity of the educational experience, and of the organization; on the other it also represents the returning point in the logic of transformation. In fact, the reflection that starts with practices considered as artifacts: the most visible manifestations of culture, can come to touch, if properly guided, those "arguments" which are by definition hidden and difficult to explore: values and basic assumptions to set them anew as varied practices.

The reflection on a school or, at least, on the dominant culture is configured in all respects as a theoretical and practical activity, because it takes into account both the cognitive aspects related to the practitioners' mental models, as well as the performances within the service they provide. Among other things, and in the full recognition of knowledge as a socially rooted act, built by professionals and non professionals in the school, the revision of some content oriented methodological

strategy, decided and planned uniquely by the trainer was equally suggested (Angeloni, 2008), having showed its ineffectiveness, either in revealing itself non-functional for any activity which involves a common, shared reflection, or as for the consequences of that reflective process at the organizational level.

An education process which is a school reculturing admits joint procedures, in which teachers feel free to express their thoughts, are involved in a self-directed process that takes the group as an actor in the learning process.

The focus group for this purpose, as a methodological technique has an enormous potential. Besides being an effective means to check the school organization's cultural paradigm is qualified to be a technique that facilitates the educational event since it focuses its activities on a very specific task, transforms the reflective activity in a collective group practice, and limits the numbers of the actors involved, who facilitated and guided by an expert will focus their discussions on the objects of their organizational culture, enhancing their skills over and over again, till to acquire and exercise the ability to a self-management.

In this way, the issue of in service education weight, almost perceived as a "duty" will be over. In each workplace, everyone will be entitled to communicate and because of that legitimization the tacit knowledge will become explicit and slowly objectified (embedded), incorporated (embodied), acquired (encultured) and mentalized (embrained), just in the same context where each human being is an integral part of.

The learning experience will have the advantage of using all the attribution for what is called a community of practice, who starting from problems to define (problem finding) stretches in a progressive analysis of her procedures, although peculiarly : through a joint reflection she finds out that to be put under control are those assumptions which oppose to transformation, those patterns of thought that operating in separation rather than integration mislead thought itself and lead to a short sight vision.

Through a situated, dialogical, shared reflection, the group being formed spontaneously on a really felt need of improvement and development, will have a chance to be qualified as a learning community who generates hypotheses to check through a continuous, coherent, endless process, in a word through a process of action-research.

The community of practice that is at the same time a learning community will build the conditions for calling school an "organization", making mutual commitment, and shared cultural repertoire her distinguishing traits.

The more Professionals in the school, are able to share aims and purposes, getting their institution's identity and culture into discussion, the more they will benefit, performing a transformative competence, based on improvement, and innovation maintained as the cornerstone of a process that never ends.

References:

Ackerman L.S. Transition Management: an in depth look at managing complex change, in "Organizational Dynamics", n. 11, 1982, pp. 46-66.

Angeloni G. La professione docente tra burocrazia e cambiamento, in J.Sciannella (edited by), Apprendere oggi nella scuola secondaria. Verso una competenza all'intersoggettività. Roma : Aracne, 2005, pp.83-102.

Angeloni G. Le associazioni per la qualificazione professionale. La ricerca formativa e l'innovazione. "Il Monitore", n. 4, 2007.

Angeloni G. Organizzazioni scolastiche e reculturing trasformativo. Un modello culturale per la formazione in servizio. Roma: Anicia, 2008.

Angeloni G. La comunicazione che disgiunge. "Il Monitore", n. 4, 2009.

Ashby W. R. An Introduction to Cybernetics. New York: Wiley & Sons, 1958.

Cros F. L'innovation scolaire. Paris : INRP, 2001.

Cros F., Adamczewski G. L'innovation en éducation et formation. Bruxelles : De Boeck, 1996.

Crow L.D., Crow A. (edited by) Readings in Human Learning. New York: Mc Kay, 1963.

Elemore R.F. School reform form the inside out: policy, practice and performance. Boston: Harvard Education Publishing Book, 2004.

Ferrante M., Zan S. Il fenomeno organizzativo, Roma: La Nuova Italia Scientifica,1994.

Fullan, M., Stiegelbauer S. The new meaning of educational change. New York: Teachers' College Press, 2001.

Fullan M. The moral imperative of school leadership, Thousand Oaks, CA: Corwin Press, 2003.

Fullan M. Leading in a culture of change. S.Francisco: Jossey-Bass, 2004.

Gagliardi P. The Creation and Change of Organizational Cultures: A Conceptual Framework, in "Organization Studies", Walter de Gruyter and Co, n.2, 1986, pp.117-134, in Le Imprese come Culture. Nuove prospettive di analisi organizzativa. Torino: Isedi, 1995, pp.418-438.

Geertz C., The interpretation of cultures. New York : Basic Books, 1973.

Glaser R. Training research and education. Pittsburgh: University of Pittsburgh Press,1962.

Hofer C. Turnaround strategies, in " Journal of Business Strategy", n. 1, 1980, pp.19-31.

Huberman A. M.   Comment s'opèrent les changements en éducation: contribution à l'étude de l'innovation Paris: Unesco, 1973.

Johnson G. Managing strategic change, in " Long Range Planning", n. 1, 1992, pp. 28-36.

Knowles M. The adult learner. A neglected species. Houston: Gulf Publishing Company, 1973.

Louis, K. S., & Kruse, S. D. Professionalism and community. Perspectives on reforming urban schools. Thousand Oaks, CA: Corwin Press, 1995.

Lawrence P., Lorsch J., Organization and environment. Managing differentiation and integration. Cambridge (MA): Harvard University Press, 1967.

March J.G. Footnotes to organizational change, in "Administrative Science Quarterly", n. 26, 1981.

Mintzberg H. Structures in five. Designing effective organizations. Englewood Cliffs (N.J.): Prentice Hall, 1983.

Morgan G. Images of organization. London : Sage, 1986.

Morin E. Le vie della complessità, in Bocchi G., Ceruti M. (edited by), La sfida della complessità, Milano: Feltrinelli, 1985, pp. 49-60.

Nadler L. Developing human resources. Houston : Gulf Publishing Co, 1970.

Nelson R. R., Winter S. G. An evolutionary theory of economic change. Cambridge, MA : Belknap Press of Harvard University Press, 1982.

Norman R., Le condizioni di sviluppo delle imprese, Milano: Etas, 1978.

Rebora G., Manuale di organizzazione aziendale, Roma: Carocci, 2001.

Schein E. H. The Corporate culture survival guide. S.Francisco: Jossey-Bass, 1999.

Schendel, D., Patton, G.R. Corporate stagnation and turnaround, in "Journal of Economics and Business", Vol. 28, n. 3, 1976, pp.236-41.

Wenger E. Communities of Practice, Learning, Meaning and Identity. New York: Cambridge University Press, 1998.