Better e-Learning for Innovation in Education

Edited by
Gülden İlin
Şükrü Çetin İlin
Bento Duarte da Silva
António J. Osório
José Alberto Lencastre

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Erasmus+

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New Technologies: from Risk to Resources for the Weakest Participants

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Introduction

The new techno-logical culture is mutating the basic language, orienting it more and more to speed, interaction, and sharing. As often happens, due also to the speed of actual mutations, this process does not combine itself with a consciousness: it is neither of the thought type, which new languages convey, nor of the knowledge type, to which it contributes to the creation. The logical type cognitive approach, linear sequential, structured, argumentative and abstract, is progressively being replaced by reticular logics, linked with hypertext codes.

This deep comprehension difficulty affects the subjects at risk of socio/cultural marginalisation or, in a broader sense, the weakest ones, above all. To a major availability, the response is a substantial difficulty for choosing information, on being oriented in magno-cell stimuli, on governing the multimedia world with its suggestions. Briefly, a simple informatics alphabetisation is not enough to build digital competence on which an effective knowledge can be rooted.

Our daily life is dominated by techniques, times and spaces. Our rationality follows 'technical' (A. Broers, 2009) logic more and more. Technology is introducing epochal changes – in personal relationships, in social dynamics, in both identity construction processes and in the thought elaboration mechanisms. The consequence is that it has contributed to forging anthropology, and therefore our young people's mentality on

operative effectiveness (R. Queraltò, 2008). The thing has evident consequences for the cognitive styles and the knowledge construction processes. This means that the sense attributed to learning and knowledge depends on the satisfaction of needs and desires, more and more constrained to concreteness and the immediacy of results. Tékhne, de facto, means "art-knowledge in action": in other words, a concrete knowledge, which tends more to doing rather than to knowing, as an aim in itself. It is operative, dynamic and pragmatic. Furthermore, formation technologies draw from a vocabulary that makes their social use more fluid and constrains behaviours. Today, the distance from the knowledge that characterises the generations has become wider and wider, with evident communication and loneliness problems for both sides.

In view of these problems, it is necessary to study the reasons for fascination that new media uses on young and adult people. On the other hand, one thinks that it might be useful to look for gathering those hinge elements that enhance the motivation of learning, especially for the subjects most exposed to socio-cultural marginalisation.

These whirlwind changes affect, in the adult world of the so-called "digital immigrants", the weakest subjects above all – those at risk of socio-cultural marginalisation. In view of any hard alphabetical informatics process, one accepts the possibility of using modular formative itineraries that permit the sharing of methodologies and paths from the adults. In this regard, a MOOC can represent a fundamental resource, a sort of new learning environment, which needs to clarify epistemological premixes. Lastly, it deals with motivating the adults to access a systemic thought that allows a more conscious using of the new communication technologies.

Finally, it is worthwhile making some fundamental clarifications. Knowledge, all the Knowledge, requires an epistemological preparation, because it refers not so much to the information reception, but to its elaboration. To know a phenomenon means to comprehend it, to have a clear awareness of it, and to be conscious of the self, in relation to the problems posed by that phenomenon.

The Knowledge is content and method, since it is phenomenal, in other words it involves objects, and it is founded on process, because it accounts for methods, strategies and tactics as well. It is the 'how' and the 'what', because it is a phenomenon and movement of its own construction. Knowing a phenomenon means to comprehend it, to have a clear awareness of it, and to be conscious of the self in relation to the problems posed by that phenomenon.

Techno-logical humus

Why does the multimedia attract users and how can they use its capabilities for the purposes of formation and emancipation?

A reason for the strong attraction that the new media has needs to be researched on one side applying engaged familiarity and, on the other side, in a more distant game-based dimension often experienced. Thus, new technologies provide an important role in the imagination of young people, dealing with their attention-seeking behaviour in knowledge construction processes. All of this provides a learning motivation function, through the experience of the computer. The independent game-based elements of knowledge, along with its trigger from the imagination, its evocative dimension, and a sense of adventure and discovery, are some of the causes that explain the interest the using of the computer. The learning process, and widely gained knowledge, cannot disregard the capability to refer, evoke, and enrich, the icons of an imagination that is rooted in everyone's past.

We are inside a symbolisation of reality that is profoundly connatural, as is evident in the didactic video in an interactive scheme. The means adopted with which to face the world, in its unavoidable concreteness, are determined by the consciousness of that world, and even our own consciousness; as Socrate[1] teaches, we are all in the world. As a consequence, knowledge expresses, since the beginning, its practical

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[1] The knowledge evoked in the Delphic provision implied the necessity of a deep investigation in the selves to ask the God only the essential questions, those that have an existential weight in a deep sense.

implications. One should know what kind of question to ask to face up to problems effectively – to make the right decisions, to choose what experience poses for us with awareness of the facts. Knowing a phenomenon means to comprehend it, to have a clear consciousness, and to be conscious of the self in relation to the problems posed by that phenomenon. For this reason, knowledge is content and method since it is phenomenal: it involves objects and is founded on process because it pays regard to methods, strategies and tactics as well. Due to this, its instruments cannot be exhausted even in an economic recipe book.

As Bateson reminded (1976), it is our implicit epistemology, the idea we have of the knowledge and of ourselves that allows us to solicit and guide the previous questions. For this reason, it is indispensable to possess knowledge as a way to start knowing the world and ourselves.

The reflections presented here have an epistemological mark and tend to the clarification of the formative implications inherent, not only to the technological products used in the schools but also to their hermeneutical and identity function. The conceptual cruxes on which the educational theory is based regard a language conception as an unavoidable form of interpreting and comprehending, and therefore as a trans-formative environment and the subject, intended as the interpreter who forms and contextually transforms his or her heuristic field and the world. The guidance function of this knowledge causes autonomous behaviours, which means free behaviours. Another conceptual crux acting as an important reference for our educative reflection concerns a conception of knowledge that gives substance to a meta-dimension, implying "knowledge of the knowledge" (Morin, 2007).

Since technology does not exhaust its nature in its simple application, the educative experimentation on the new technologies about instruction do not have to be resolved into their application: it is important to clarify them with the most suitable definition possible, to understand their structure, their evolutionary paths, and the vision of the world they convey. The concept of technology we think about while we use its artefacts, organises the intellectual strategies we adopt in the

teaching-learning process as well as the procedures and the educational praxes. In this sense, the organisational and operational structure of the technologies can be conceived as a sort of grammar or a linguistic expression because its planning is a composition argued with instruments, procedures and aims.

Knowing its logical-grammatical architecture means being able to comprehend the semantic by making the educative choices' constructive hierarchy, evidences, instruments, theories and values individual, coherently bonding with its guiding principle towards educative aims. A formation (A. Gramigna, 2009) that instrumentally aims at technical and circumstantial learning risks making the subject collapse in disorientation, fluctuating between enthusiasms and pessimisms, which can only generate confusion. For instance the illusion that knowledge can be exhausted may rise up, for example, in the capability of recognising the right icon to click, or the ability to remember the subsequent movements to accomplish aside from their theorisation – from triggering inside a clear metacognitive dimension. When adopting the perspective of knowing the grammars subtended to these movements – the strategies and the subsequent symbolisations – then it becomes easier to comprehend how this has interesting consequences when considering the idea of knowledge being matured.

As a consequence, the objective is to bring to the surface the speculative blueprint useful for clarifying the processes through which one can build on any kind of knowledge. In this process, we have to keep in mind that the levels and the procedure for its construction are conditioned by opinions, which are often just partially conscious. Studying these dynamics can help us to comprehend the processes through which we come to 'that' knowledge that can help one 'to know the knowledge. Each learning process is strictly connected to one's personal epistemological knowledge of people gained through a dialectic relation. Acquiring the knowledge can be supported or obstructed by the capability of recognising information and processes as important factors from a cognitive point of view. When oriented in an educative sense, this can help young people to

elaborate new cognitive maps; to multiply the possibilities and the strategies of the problems solving as well.

It deals with an hermeneutical pedagogy first of all tending to comprehend the educative phenomenon linked with the formative and the environment of educational technologies. Then to explain them, for an education that aims at the construction of orientations, guidelines and reference points, helping us to understand the present and to face risks with full knowledge of the facts. Among these, we signal:

1. Simplifying vision of the knowledge, reduced to a storage and fast consumption of information;
2. New forms of cyber-mobbing;
3. Solipsism of virtual relationships;
4. Addiction;
5. Difficulty in orientating into the virtual world.

It is possible to represent and explain the knowledge in the context of these new meanings:

1. Processes of construction, organisation, divulgation and trans-formation of knowledge;
2. Methods, meaning contexts and their construction conditions;
3. Conditions, in turn, pose the problem of those constructions' verifiability. For instance: when and in which degree does knowledge possess certain truth, efficiency and certainty criterion?[2]
4. Choice of information suggested by the experience, their interpretation and collocation inside our cognitive system;
5. Relation of such processes with our cognitive self: i.e., with the conscious and unconscious perception, which we have both in our cognitive field and in our acquisition, elaboration, as well as our invention potentialities;
6. Instruments of the control from the fundamentals of different sciences: the specific language, field of study and application, contents peculiarity, method, procedures, theoretical background, consequentiality, verifications, instrument, and the coherence of the procedural meaning in the relationships that exist among them;
7. Transverse capacities and epistemological contaminations among different disciplinary areas: transfer of metaphors, use of narrative segments coming

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[2] One of the most important reflections which deals with this resides in the platonic theory of justifications, which poses the problem of the necessary condition for a knowledge to be true; Cfr. Platoon, Teeteto, in all the writtings, cured by G. Reale, Milan, Bompiani, 2000.

from other fields, and of methodological cues. In brief: intercultural scientific competence. By competence we mean a basic knowledge that activates a series of acquisition and, for this, has a metacognitive value. The social image of encyclopaedic knowledge has been replaced by contextual knowledge. This further implied a declaratory and a sector-by-sector-storage behaviour. The latter evaluated instead the heuristic and strategic function of each subject. Nonetheless, the procedures, codes and approaches are in a metacognitive sense. In this second perspective, the pluralism of there being several points of view, different languages, a number of theoretical constructions, turns out to be fundamental. A consequence of this new way of interpreting the knowledge is that several conceptualisations take place in disciplinary areas or experimental research sectors highly different from the ones in which they are germinated. For this reason, it is important to understand the knowledge-semantic dynamic – the processes and the mechanisms – to be able to build other knowledge and to transfer competence from different areas and times.

Problem description

The knowledge our society reclaims is oriented to the ideal of science that is also technology because each develops the other, and because science makes technology its criterion of value. It is a concrete and instrumental knowledge, requiring a specialised knowledge that is fragmented, pragmatic and to some extent anti-holistic. It is right in this sense that European and US policies (U. Margiotta, 1997) have oriented themselves from the Lisbon Strategy onwards.

Knowledge is a conceptual entity that is relational and founded on process: it deals with a synergic system of dynamics that has unity and physiognomy determined by its own movement. This requires definition of the role formation technologies play in the knowledge constructing process and the educative experience, and identification of the relation between the scholastic and the epistemological praxes underlying them.

Technology is not just a reflection of the technicality; it is also hermeneutic because it represents a total matrix, not only in the judgement criteria and therefore the criteria of social value, but also in the processes determining identity, be they collective or individual. By value, we mean a judgement criterion that characterises a relationship model tracking a path of signification.

The formation technologies convey a vision of the world inherent to the technical artefact, as well as the strategies they activate. The meta-cognitive tension animating the teaching optimisation processes through new technologies has an ideological dimension, in the sense that it promotes a way of looking at things. The technological artefact – an essential condition in science – meditates on the knowing, the school and its models. Here it is the relation between educative fact and theory that appears from the beginning as a trans-formative process involving the two opposite poles of the matter – which are never motionless, neither remaining the same.

The pragmatism is the value criterion of the procedural norms that the technique applied to the formation employs as this uses normative-pragmatic formulae. This pragmatic nature is implicit in the technical rationality that is the anthropological figure of our students (Livingstone, 2101). To the digital natives the 'what-is-it-for?' is not implicit in the 'what-it-is and certainly comes before it. Instead, knowing was equal to a maturity of coherence and clarity on a phenomenon, its utility contained in its own semantic, though there was no substitution.

Now it is easier to deduce that the technical educative side leads to an empirical experience that underlies an epistemological experience: i.e., it refers to the models that are rarely explicit and conscious for those who use it. For this reason, it is evident technology draws a value hierarchy that must be explicated in order to orient in it with criticism: i.e., with full knowledge of the facts. Hence it becomes necessary to formulate an epistemological model tended to the construction of competent criticism: this means being able to compare it with the hybrid nature of the actual science and technology. The hypothesis is that knowledge abides by its semantic contents, but has a meta-cognitive tension referring to the cognitive processes as well (Margiotta, 2007).

Regarding formation technologies and their use in schools, they represent both a method and a technique for the metacognitive tension of the active strategies. By educative method we mean a coherent totality of procedures and strategies governed by norms that are held by principles.

Therefore, it deals with a conceptual system, referring to an artisanal competence in procedure that serves both conceptual instruments (e.g., executional models) and technical material supports like software.

From the epistemological studies intended as a science studying the formal structure of the scientific knowledge, there may be a tendency to exclude the contents from the (formation) discipline being studied. There is a belief that when applying educational technology, disciplinary contents – cultural in a broad sense – are intimately linked to the pragmatic logic, are a little abstract, and are differently formal from the technique. Such logic, characterised by its concreteness, abides by a cognitive approach leading to consequences for formation.

There is an argument that the content conveyed by the teaching-learning process when using technologies ends up expressing a pragmatic tension, making itself more essential and focused in relation to 'transmission' aims that appear more highly and clearly delimitated.

The procedure abides by the learning and the teaching method, i.e., the construction and transformation of scholastic knowledge, so realising the mutual dependence of method and technique: both must be detected through an epistemological awareness framework.

From the beginning, the knowledge built with new technologies presents as a symbolic praxis – concrete and abstract – because in schools technique is a way of thinking that has to establish a formative strategy and an educative technique: otherwise it is just sterile technicality. The technique is a knowledge construction, from both symbolic and mental perspectives, and ultimately from the artefact's technological perspective. It is process and product, construction and construct, object and symbol.

As a consequence, the conceptual separation between the cultural symbolism of the object and its mental process should have only a transitional nature that is useful for clarification. Consequently, in relation to productive use of formation technologies, it can be seen that the *forma mentis* to educate should contemplate both procedure and finality.

The rigour of scientific educative knowledge emerges in the clear consciousness of the epistemological matrices from a continuous

interrogation between techniques and facts. The aim is elaborating concrete proposals, facing and solving the problems emerging from formative emergencies in the contemporary world. The pedagogical research is scientific when it is rigorously coherent among targets, instruments, methods and languages. This is useful when it helps to produce not only technical objects but also theoretical ones that improve schools, as well as building strategies to solve problems.

The study of knowledge is a practical science – useful and operational – because it allows learners to reach certain aims with a sense of tangibility, often beyond immediate contingency. However, there is also a need for a technology and a science that reveals consciousness of the epistemological, economic, cultural devices they trigger, along with an ethic going far beyond one of professional and procedural moral obligation that is standard for much contemporary research. In the light of this omnivorous pragmatism, knowledge forms us in the sense that it constructs and perfects our capabilities: it weaves the narrative storyline of the autobiographical self, conveying existential scenery.

Knowledge helps us to understand the world because it gives us the keys to interpretation, orientation and comprehension; therefore, it intervenes in the problem-solving process. In this idea, one can deduce that knowledge helps us not only to express an ethical option, so making one responsible for the many different options that exist, but also in founding a solution to moral conflicts or in meditating around a values hierarchy. This can be deduced because, through knowledge one can create and realise plans in both a contingent and an essential way: affirming it helps in the achievement of goals.

With due consideration of this, it is possible to start with identifying the needs associated with socio-cultural marginalisation among the most exposed adults. For this it is necessary to plan educative actions that would help these adults to provide themselves with communicative instruments tending to develop orientation and auto-tutoring instruments in the global world. Referring to the formative requirements intrinsic to the needs of such subjects, one can signal their difficulty to relate with

school-age pupils and the educational relationship as well. It is useful to consider the risks as much as the resources connected with the use of Internet and the consequences of applying new communication technologies, starting with awareness of new social and productive dynamics.

The grammars, developed with new multimedia languages and their virtual nature (paradoxically less virtual than the books), accommodate the need of recognising a value connecting to the individual through the instrument. It is in this subject-machinery connection that a door to immersion opens, to inclusion within a world that magically appears on the screen to open the imagination with games and actions along with a certain way of thinking. This immersion makes the level of abstraction as proposed in the computer experience even thinner: this is because the subject can be projected inside a mechanism and a process that explores knowledge. In addition, there is the narration of self-experience, and that of one's own symbolic universal construction.

Then, if the computer represents a sort of extension of the self, of a rarefied place to live at a certain time, the subject itself becomes part of that environment which can be inhabited first of all, and then lived experiences come from consented and solicited encounters that emerge through the construction of relationships with the informatics instrument.

The proposal

In the light of these considerations, as of the most recent international researches[3], the authors retain a view that the use and value of MOOCs may represent an effective proposal for weaker subjects; for learners who are at risk of cultural marginalisation and those learners who need the most cognitive support. This is due to the following:

1. The online provision allows its use in a massive and a free way for the many students who can search or enter into social networks. In such a way, they can simplify the didactic approach, and contribute to a critical attitude;

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[3] Cfr. Free exchange. Massive open online forces. The rise of online instruction will upend the economist of higher education. The Economist, 8 February,2014

2. They promote the internationalisation and therefore the possibility to acquire European level recognised credits; consequently, they promote ideas and the spreading of new interactive methods;
3. They promote autonomous research activity, for which they promote multi-disciplinary interaction, facilitating the elaboration of flexible cognitive maps.

Nevertheless, weak points to monitor also exist:
1. They reduce the direct proximity of the professor and the student;
2. There is difficulty on realising laboratories or experiences requiring manual skills;
3. They easily reach students who already have a high level of motivational learning.

That is why the authors maintain that a clarification of the deep semantics linked to the formation of new technologies may be necessary for students, professors and researchers, because of the existence of these grey areas. By assuming a sort of "Guide" to the competent use of MOOCs, the authors think that it is necessary to pursue these objectives to help the subject to:
1. Identify, on the basis of his or her formative needs, a selection of the themes to explore, in the light of the plural operative approaches;
2. Analyse the starting knowledge instruments in the light of the objectives to pursue;
3. Interpret the information, on the basis of ones own life experience and working needs;
4. Meditate on the knowledge functionality and on their meta-cognitive value, with the aim to transform them into transferable competences to different contexts and situations: this reflection allows one to possess not only the contents but also the construction processes of both the knowledge and the thought models.

The hypertext dimension of a MOOC lends itself to important considerations. The hypertext is consulted from different initial points: autonomous and independent, it escapes from the book linear chapter-paragraph succession, where this is a recoverable feature only at a conceptual level. The hypertext dialogues through the graphic interface to which information is organised allow the user to choose their own reading paths, adding links or materials. Those listed here are therefore the exact same features of the paper-based support and the alphabetical, extolled by

the enormous technological potential of the interface, with its cut-paste, find-substitute, zoom visualisation, and fast-sliding functions.

The hypertext dimension transforms the book into an electronic text, into bytes, depriving it of its paper dimension, which can be recovered only by printing, or better, by downloading the document from the computer. However, at the same time, associating it to the other codes that interlace a system interrelation with a sort of formalisation 'from a formalisation'. Moreover, the hypertext allows the reader to intervene inside its own structure, transforming it into being a co-author because the informatics space transcends the bounds of physical materiality exemplified by paper. This allows each one to bring transformations that are significant for the construction of one's own knowledge pattern. In this regard, the authors identified these fundamental areas of competence:

1. Linguistic-communicative;
2. Technological;
3. So-called 'Human' sciences;
4. The 'scientific' ones;
5. Finally, that border area allowing additional communication around complex problems.

The combined intertwining of multimedia language codes on one side assumes language units strongly pertained to each other – as the image conjugated to a sound and the typical movement of television language: on the other side it leads to new conventions for the using of the alphabet. This last process implies the formalisation of a technique using the alphabet, already intensely formalised in itself, at a relevant symbolic depth and therefore strongly abstract. It deals with a curious combination that unifies opposite poles, or those poles that may seem opposite at the first sight: the connatural and the abstract, the oral and the script. Both paralinguistic elements and ideographic ones enrich the image-sound movement, the alphabet and its new use. Like emoticons, or the onomatopoeic parts that are traditionally strangers to it, they have produced the beginnings of a new language and unusual metaphors for knowledge from different philosophical approaches to knowledge. Scarce epistemic wisdom (Bateston, 1984) does not permit one to see the

relational and dynamical formational texture based on technology: the synthesis is in the analysis.

The intertwining of the multimedia codes implies a response to the nature and the complexity of these nexus. These nexus are always social-anthropological, and therefore linguistic, and intersect with each other on different planes, producing a structure that escapes from traditional reading categories. This is why today it results in "knowing the knowledge" fundamentally.

'Knowing the knowledge' (Morin, 2007) means to make values and decisions explicit. If, as Foucault (2001) affirms, "practice is a totality of elements passing from a theoretical point to the other, and the theory, the passing from a practice to the other", the praxis, regarding pedagogy in the formation acted by technology, is both practical and theoretical. The "passing from a theoretical point to the other" as well as "from a practice to the other", are determined by a judgement criterion that establishes a sense-based relationship.

In considering the consequences of these conclusive thoughts, regarding the epistemology and the educative praxes conveyed by the new technologies, the technologies result as an instrument produced by the knowledge during its construction. Each learning process acted by technologies – even those considered as immediately practical, technical and instrumental – has an existential depth, concerning our symbolic multi-verse, merging mental process with execution, representing the product and the educative content at an instrumental time. It is our scarce epistemic wisdom (Bateston, 1984) that does not allow us to see the relational factors or the dynamic, formational texture that technologies experience, as well as existing within them.

In the light of these considerations, the authors maintain that formation technologies, as well as the praxes they trigger, are both theoretical and educative fact: at the same time, they produce the one and the other. Their pragmatic logic needs firstly to be decoded through the proposition's elaboration to locate phenomena in a system that is coherent and elastic, then integrated into a hermeneutical and relational system

based in process. The following are turning points that can find further definition in disciplinary didactics.

1. To elaborate significance patterns around technology and society paradigms along with the students to facilitate an epistemological awareness framework;
2. To establish multi-relational and multimedia flexible models that reorganise disciplinary knowledge around thematic salient nuclei for the present;
3. To study linguistic rules connoting formation technologies that are the schemes through which they structure discourses: that means recognising both the grammar and the semantic, along with the formative value of their discursive conventions. This helps to explore formative potentialities of technologies intended as forms of thought reorganisation;
4. To create, along with the students, new representations structured by the knowledge in the metacognitive value comprehension of the formation technologies. Web interaction implies a logical, emotional, sensory, sensory-motor immersion for the learner, who connects meanings from a code to the other, following conceptual maps, intellectual strategies, emotional paths, aesthetic vocations, and value choices. Our human / social issue lends itself to a less univocal reading from the one suggested by the book's epistemology – a reticular reading, retrieving the rituality of the oral to extol suggestion, emotionality and rationality. Then there is the extraordinary multimedia formative valence, in its complex metacognition activity. The subject acts expertly in the informatics world, in the hypertext, where they construct the knowledge in elaboration of relational plots that unravel themselves among different languages, and therefore utilises different kinds of intelligence at the same time. The subject is open to multiple cognitive approaches; gathering information with a logical, emotional, aesthetic, sensory-motor process. The subject does not refer solely to an abstract thought, but uses different intellective strategies, which subtend to different linguistic forms. The subject utilises a connective thought in a creative way, and is ready to reconfigure their own knowledge theory in view of the new cognitive experiences. However, this refers to an experienced navigator.
5. "Knowing the knowledge", starting with an explanation of "what-is-it-for?" – because this is the on-going question our young interlocutors ask and this is the pragmatic logic that society pursues – to come to the understanding of "what-is-it-for?"

The aim of such formation is in the construction of "explanation models' manipulating capability, of execution and regeneration of proficiency systems concerning the expert development of the previously studied cultural and experience areas" (Margiotta, 1997, p. 76). In a connective thought formation and in the capability of facing different approaches to

knowledge at the same time, there are different forms of intelligence in refining a sympathetic cognitive attitude. Another proposal regards scholastics and academic curricula predisposed to the disciplinary opening, which does not rule out recurring scientific specialisms.

A teaching method, a research study that lends itself as a procedure of the reflection, and *for* reflection, that is open, generative, plural, uncertain, and relational while being based in process, because it is able to trans-form itself during the path – which means it is able to learn. Such knowledge does not offer us just the instrument to construct keys to interpretation and the orientation of maps into the real world, but it helps to automatically look for the answers to the need for identity, which young people and especially adolescents above all, express in the 'delicate' phase of their growth.

The need for identity is met through active, critical participation in the auto-determination processes, accompanying both young and less young adults to become conscious protagonists of their time.

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