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Editorial EOS

Towards a new paradigm of strategic learning: The role of social mediation, the self and emotions

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Abstract

The paper aims to identify a solution to the dilemma that currently exists within the paradigm of strategic learning: the dilemma of whether a strategy should be seen as an action dependent on the specific knowledge of an educational actor—strategic knowledge—or whether it is dependent on a planned instructional context—strategic context. This article will argue that the mental inter-psychological scenario must also be seen as a space of dialogue, an inter-psychological space in which different versions of one's own identity or selves interact, decisively influencing the learning strategies, in the case of learners, or the teaching strategies, in the case of teachers, that are activated when faced with a certain problem. In order to come to this conclusion, we will briefly review the state of the art of the paradigm, based on the empiric evidence available, some valuable criticisms regarding the need to incorporate the educational actor's social and emotional goals, and the theory of the construction of multiple selves as a hypothesis that incorporates these socio-mental elements. Finally, an agenda for future research in the line of this article is proposed.

Introduction

All contemporary currents in Educational Psychology agree that students need to "learn how to learn" if they are to meet the requirements of twenty-first century society. However, there is no consensus as to how learning strategies should be defined, how they are linked to the contexts in which they appear, or the kind of influence that goals and emotions have upon them, in short, how they operate.

In this article, we will briefly review the main areas of conflict and we will propose a socio-cognitive approach to strategic learning; we claim that this better explains the link between text and context and can help identify the mechanisms involved, whether social (mediation) or personal (emotions, personal goals). In the second part, we will analyse optimal conditions for recreating contexts capable of promoting strategic learning. In the third and final part, we will argue that the intra-psychological context acts as a space in which different versions of one self, that is, different selves, shaped by conceptions, discourse, emotions and strategies, are triggered jointly.

Learning strategies: text versus context

A decade ago, after a thorough review of the literature available at that time, we tentatively defined a learning strategy as conscious and self-regulated decision-making directed at meeting a learning goal and adjusted to the conditions of a specific instructional context (Monereo 1995). Since then, the concept has undergone a radical change. After the first debates about the correspondence between technique, procedure and strategy, others debates followed which focused on the specific or general nature of these strategies, and whether or not they were dependent on specific domains of knowledge. In the applied teaching field, this controversy resulted in support for two possible teaching styles; one that is more integrated or fused within curricular content, and another, the development of content-free programs, aiming to develop different thinking skills or strategies (an excellent review of both approaches can be found in the compilation by Maclure & Davies, 1991). The backdrop of these discussions was, and still is, different epistemological and psycho-educational concepts about the meaning of knowing, learning and teaching, and about the mechanisms that govern these processes.

In our case, we align ourselves with a socio-cognitive line of thinking which, on one hand, recognizes the significance of the personal construction of mental representations of reality and their mediating role in the cognitive process of information management and, on the other hand, accepts that the materials and tools used in this construction not only have a social origin, but also a social development and meaning. As a result, our concept of strategy has moved towards increasing interest in relations that may exist between representation and context or, more specifically, in studying the kind of context representations that lead to performances one may consider strategic, and the kind of educational contexts that elicit representations allowing learners to turn to strategic solutions.

Both research lines have led to concepts that we consider to be linked; on the one hand, the idea that there is a special type of representation that produces knowledge that could be called conditional (Paris; Lipson & Wixson, 1983) or strategic (knowledge of when and why to activate any kind of knowledge) and, on the other hand, teaching and learning contexts that clearly seem to promote the acquisition of this kind of knowledge, a sort of "strategic context". Both dimensions, strategic knowledge and strategic context, could logically have a multiplying effect, but could also maintain a certain interdependence. When faced with an unfavourable or even hostile context, strategic learners would be able to survive by adjusting to the circumstances imposed upon them and trying, as much as possible, to meet part of their personal objectives. Alternatively, despite the fact that a teacher creates/designs a context favourable for discussion and reflective analysis, the students may not have the strategic knowledge required to respond to it.

Up to now, we have worked within this dichotomy between text (personal) and context (educational) (Monereo, Pozo & Castelló, 2001), convinced that we should provide learners with personal strategic resources and that, additionally or simultaneously, it was advisable to influence curricula, organizations, advisors and teachers to recreate contexts that promoted the strategic use of knowledge.

However, this twofold perspective implied at least two underlying problems:

(a)   On one hand, text was still treated as a variable with a certain independence from context. From a socio-cultural perspective and according to Bakhtin's (1952/1986) assumptions, for example, text and context are non-dissociable. *De facto*, the students' text, that is, their representation of their own resources and of the situation, not only determines how they interpret their place in that setting and the decisions to be made, but it also influences how other actors represent the students' position and their own position and options when facing a certain representation. In other words, a more or less explicit context, that is, a supra-text, is constructed, where the different representations of the actors come together, and performances will acquire meaning (*"when he says this, he means..."*) and sense (*"he says this because he intends..."*), based on this context.

(b)   On the other hand, the importance of what has been called the "warm or emotional cognition" of strategic behaviour was being overlooked. We know that in teaching-learning situations, the decisions we make are often due to our perception of how we feel and, therefore, to forms of emotional self-regulation, in addition to the strict logical-cognitive demands that this situation may imply.

It would be unfair to state that no study has tried to establish a link between representation, emotion and context; the extensive and consistent works of B.J. Zimmerman, C. E. Weinstein, D. H. Schunk or the work of P.R. Pintrich, amongst others, regarding the link between self-regulation, motivation and achievement, are clear examples of this line of investigation. Notwithstanding, the general tendency has been to try and explain these links in terms of correlations between independent factors, thus trying to piece together a puzzle to which new and decisive factors are being added continuously.

We feel that instead of continuing to add new pieces to the puzzle, we should try to explore which type of structures and/or functions enable the integration of these variables and to try and explain the actions of the learner-in-context (and also the teacher-in-context) in all its globality and complexity, from a more systemic point of view.

The need to elaborate a theoretical framework about strategic learning, thus integrating these perspectives, requires a thorough review of the paradigm, and this is what we will attempt to do in the next few pages.

The concept of strategic context

Two historical movements clearly influence the conceptualization that we have supported so far, that there are contexts that in practice inhibit the emergence of autonomous and self-regulative behaviours, and others that would promote their appearance, i.e. strategic contexts. On one hand are proposals by the Group C & T Vanderbilt (1992) to design "powerful learning environments" where learning and use of effective strategies have a key role. On the other hands, studies by an outstanding group of researchers (just to mention some: J. Bruner, M. Cole, J. Lave, J. Wertsch, B. Rogoff, Y. Engeström, A.L. Brown, C.B. Cazden), have been clearly influential by revitalizing L.S. Vigotsky's work and are grouped around the Laboratory of Comparative Human Cognition (LCHC), University of California. This group is interested in the study of the different ways in which culture mediates people's cognitive activity in specific contexts, promoting substantial changes in their learning and development. When this interest in analyzing forms of mediation in context focuses on the educational field, researchers do not hesitate to go into the classroom and record real situations in order to thoroughly examine the interactive and discursive modalities commonly used in school practice.

With regard to learning strategies, the impact of socio-cultural Psychology and its different families is huge, and pioneering works by A. Brown, G. Duffy, S, Paris, B. Rosenshine or M. Pressley on how teachers and students negotiate, transfer, apply, and regulate learning procedures and processes in their daily educational practice imply a radical change in the way we understand the complexity of teaching-learning contexts and their decisive influence on the learning of strategies (an excellent review can be found in Pressley, Woloshyn, Lysynchuk., Martin., Wood & Willoughby, 1990).

On a more modest, local scale, our research team has developed different research projects that attempt to identify the diverse intra-psychological, inter-psychological and institutional conditions that could recreate contexts that promote

learners' acquisition of strategic knowledge. We have performed studies on concepts (Castelló & Monereo, 2005), on learning methods based both in the classroom (Castelló & Monereo, 1999; Durán & Monereo, 2005; Monereo, 2001) and in virtual settings (Monereo, 2005; Monereo, Fuentes & Sánchez, 2000; Monereo & Sánchez, 2004), on assessment methods (Castelló & Monereo, 2005), on ways of organizing strategic teaching (Castelló & Monereo, 2000), and on how advisers can enhance teaching through teacher training (Badía & Monereo, 2004).

One result of this work is the theoretical delimitation of key conditions that should be present in a strategic context that promotes strategic learning. These conditions are represented in the following conceptual map (Figure 1).

Add figure 1. Conditions of a strategic context

As can be seen in the map, every educational context contains certain key conditions, the influence of which would be decisive in promoting strategic knowledge in students, namely:

a) The modification of learners' and teachers' concepts concerning the meaning of learning and teaching (epistemological dimension; for instance Moshman, 1982; Phan, 2006), their concepts of having a good command of a given subject (specific domain dimension; for example in math: Noddings, 1990; in science: Edmondson & Novak, 1993), and of being an autonomous learner (autonomy dimension; an example from the teachers' perspective: Waeytens, Lens & Vanderberghe, 2002; and from the learners' perspective: Dahl, Bals & Turi, 2005). Research indicates (Pressley, Harris & Marks, 1992) that changes in these concepts may lead to the perception that reality is constructed personally and that what is constructed is a "truth" agreed upon by the scientific community and that, as such, it is always falsifiable and modifiable. In this sense, both objectivist positions (advocating for universal and a-contextual truths to be transmitted) as well as relativistic positions (which tend to confer the same status to any opinion) are rejected. Knowledge of disciplines also needs to change in a threefold manner: (1) learning a discipline involves having a good command of the communication language, i.e. the discourse of that discipline; (2) it also implies identifying the epistemological mechanisms through which this discipline creates its own particular
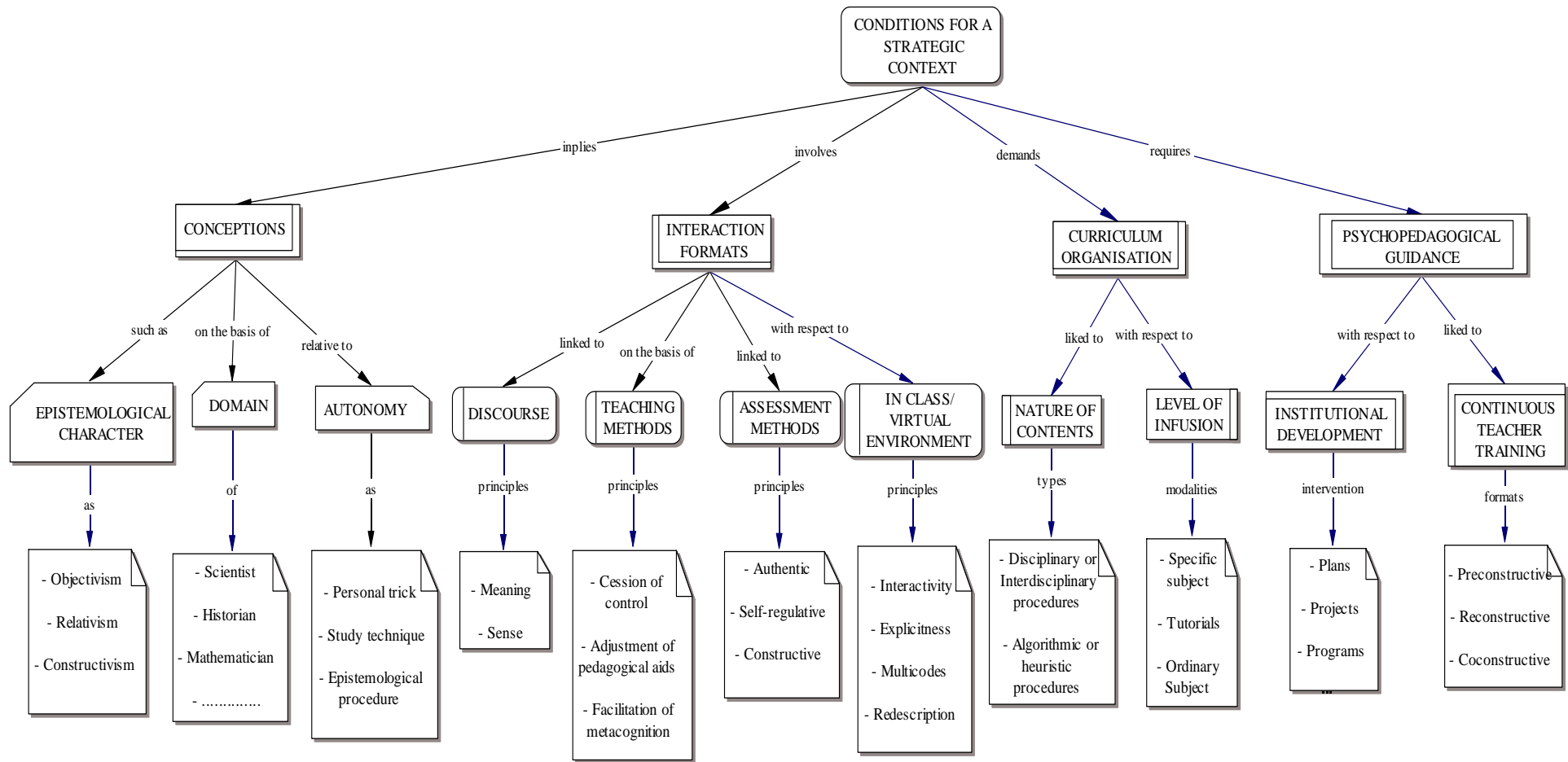
Figure 1. Conditions of strategic context

knowledge; (3) finally, it should be remembered that we always think on the basis of specific content and that this content is not neutral, but rather implies specific ways of thinking and learning. Therefore the teaching of strategies has to be linked to content.

Finally, the concept of an autonomous learner must change. Views such as the above, which are prone to reducing strategies to mere study techniques or idiosyncratic study tricks, greatly hinder the reflective, transferable use of ways of learning. On the contrary, in order to achieve our goal and train learners to be strategic, it is more useful to define autonomy in terms of a chance to self-regulate one's own learning through the mediation of others.

b) Modification of formats of educational interaction that teachers tend to use to teach their subjects. Without aiming to be exhaustive, this modification should affect, firstly, the teaching methods deployed when teaching strategies. Methods based on reflecting aloud and the gradual transfer of decision-making when solving problems have been especially beneficial. Secondly, assessment methods must also collaborate decisively in the analysis and assessment of the teacher's and students' progress in the construction of strategic knowledge.

And last, but not least, there is the discourse used by teachers to justify the acquisition of certain learning strategies. Students often consider such strategies superficial or secondary, or, even worse, as a distraction from their main goal—to pass their exams in a certain subject. Only if the teacher is able to point out the functional importance of strategies to students, both while they are students and later in their professional (and even personal) life, will he or she get them to take this issue seriously.

This entire set of educational measures should be put into effect not only in the classroom, that is, in face-to-face settings, but also in virtual settings. Virtual settings are the ideal means to make cognitive processes explicit, processes which often seem obscure in conventional interaction. They can also help redefine one's own generated knowledge, thanks to multimedia and asynchronous communication provided through Information and Communication Technologies.

c)   Another essential measure is to modify the curriculum organization at two levels, with regard to the nature of the content to be taught, and to the level of infusion achieved. Concerning the former, the curriculum usually leans towards algorithms and disciplines; that is, education tends to favor those procedures which are well-established in a given subject and that, in addition, are easy to teach because they consist of fixed operations that are performed in an equally fixed order. This kind of education not only limits generalization outside the content studied, but also overlooks other much richer and more transferable procedures that a heuristic-interdisciplinary education would delimit. This group would include classical study techniques (outlines, notes), new generation techniques (mind maps, Gowin's V), or work with more general and extensive procedures such as planning, elaboration of hypotheses, anticipation of results, supervision of processes involved, and so on. Concerning the educational level of infusion, the chance to coordinate tutorial classes to explain how certain learning procedures work, and may be effectively connected, used and assessed in different subjects, seems to be the most efficient modality for students to finally achieve a successful transfer of learned strategies (amongst pioneering works which defend the infused teaching of learning strategies, see the work of Bransford and his colleagues, 1990).

d)   The previous section dealt directly with the the need to modify institutional dynamics, particularly through psycho-educational advising. Two crucial aspects can be identified: intervention in developing institutional guidelines for the mid and long term, and the need to provide continuous training to the teaching staff. Beginning with the latter, we have already commented on the need for a substantial change in teachers' concepts and practices towards what we could call strategic teaching. For this to become a reality, internal teacher training systems must be implemented in which the teaching staff can analyse classroom practice and can exchange experiences with colleagues. Recent studies such as that of Perry, Philip and Dowler (2004) have shown that, when provided with adequate training, even student teachers can learn how to design tasks that promote self-regulated learning.

At the institutional level, we are talking about promoting generalized strategy teaching through incorporating it into the different working documents of the school: plans, projects, programs, and by adjusting to demands. Perhaps this way, what some actors in the community are calling for (e.g. parent associations) can become a small-

scale action program (e.g. at an educational level), whose success may give rise to its implementation in an innovation project applied to one or more stages for a limited period of time. Consequently, if the assessment is positive, it may be extended to other stages and finally become part of the school's annual plan, as a consubstantial part of school objectives.

This contextual view of strategic context, although more explanatory, still has significant gaps and voids that, for the moment, prevent us from talking about a paradigm of strategic learning *sensu strictu.*

The first and most obvious weakness is the need for a more adequate explanation of how these different contextual conditions relate to each other, and how the strategic learner or teacher establishes priorities when making some decisions and does not do so when making others. In other words, we should establish in more detail how these strategists "read" the global context and determine the weight of each condition in their decision-making process. H. Mehan (Mehan, 1976; Mehan & Riel, 1982) has been one of the pioneers in studying the learners' social competence in adjusting to the classroom context.

A second weakness has to do with lack of attention to related aspects, on one hand, to the subject's identity, his or her goals and aims, interests, and expectations and, on the other hand, to the subject's emotions or, rather, warm cognition, regarding the feelings activated in a certain context and how this emotional perception influences his or her decisions.

In the next section we will try to deal with these weaknesses.

Strategic learning as a result of interaction between different contexts

One study that radically and clearly asserts the need to include the student's intentions and emotions in a complete theory of self-regulation and strategic learning comes from M. Boekarts and her colleagues (Boekaerts, 2002; Boekaerts, Els de Koning & Vedder, 2006). The author feels that there is sufficient evidence to argue that, although self-regulation is a central issue in relationships between instruction and learn-

ing, the theory at its base is most likely oriented wrongly, or is incomplete, and includes some incorrect concepts that need unmasking. To justify her position, she presents two weighty arguments:

1.   Current theories do not deal with students as "whole persons in context". All students self-regulate their behaviour in class but it is essential to know their personal goals in order to understand how and why they self-regulate in such a way. According to Boekaerts, self-regulation is linked to the structure of individual goals that are part of the theory of *self* and are key to understanding the student's adaptive system. In line with this argument, she adopts the theory of self by Carver & Scheier (2000), which distinguishes three different levels of goals that would make up the learner's "ideal self": high-level goals that define "what I want to be and achieve…,"; personal goals consisting of specific projects of an academic, social and emotional character; and scripts or action programmes that are preferential when they affect more than one project and goal. The instructional consequences of such an approach are crystal clear: in order to create an efficient "powerful learning environment" it is essential (a) to try and connect demands and school tasks with students' personal goals and projects, and (b) to encourage them to extend and expand their repertoire of scripts to achieve such goals.

2.   In addition, current theories about self-regulation do not take the students' social and emotional goals into consideration; they only refer to their academic goals. However, we know that students feel much better and learn more when they are respected and treated with affection and fairness. Turner, Meyer and Schweinle (2003), based on an exhaustive review of the main theories of motivation and on the results of their own investigations, conclude that a positive emotional context is crucial (e.g. through supportive discourse) in order to facilitate deeper cognitive engagement, effort and self-regulation.

Briefly, a theory that aims to precisely and completely explain the decision-making processes underlying the use of learning strategies must integrate the students' personal goals and objectives, and their determining social and emotional factors.

It may be argued that these personal goal structures are not constructed in an isolated and solipsistic manner, but rather that they have a social origin where others (fam-

ily members and in particular teachers) contribute decisively to their development through interaction and that consequently, this construction can be very different from one learner to another. Moreover, as we will try to argue in the following pages, we think that a student does not build a univocal and permanent self, but in many cases manages different selves with different levels of coherence and consistency, each of which would be activated differently in different contexts and in the activation of which teachers and their demands play a crucial role.

Similarly, we should consider the possibility that the subject does not have to deal with conflicts between goals, but instead has to manage conflicts between the different representations of himself or herself or the *selves* that he or she has constructed and can turn to. A student for instance often has to negotiate between his/her self as a conscientious student with corresponding strategies, and his/her self as a fellow-student of "slacking" classmates, with a different set of strategies. We need to find out more about how, when and why one or the other self dominates in this internal dialogue.

In order to understand how a certain context is capable of eliciting a certain self, with its set of emotions and strategies, and excludes other selves, it is essential to find out more about how this "co-n-text" (i.e. a text that is constructed through the dialectic confrontation of various texts) is built, and in order to do so we must analyse these different texts in interaction. We need to investigate both those texts which stem from the interaction between teacher and students and their peers, and those texts resulting from the interaction with the school management and the institutional culture they defend. Probably more importantly, we must investigate the texts that result from the intra-psychological dialogue taking place in the subject's mind between the possible selves, which compete among themselves in every problematic situation that forces her or him to "stop and think," that is, to adopt a strategic position.

Only from a unified paradigm can we respond to some unanswered questions such as: why is it that students (or teachers), despite being aware of and having a good command of a study (or didactic) strategy in one subject matter, do not apply it to other subjects? Why is it that some students, despite being capable of solving complex problems in their daily environment, do not solve problems of similar or even lesser complexity in the classroom? Why do we explain and process the same information with the

same interlocutors differently in a formal (in-school) learning situation than in an informal communication situation (in a café, for example)? Why do teaching and guidance professionals talk, think and act differently when confronted with the same problem when it involves a student or colleague, than when it involves a friend or family member? We think, as has been observed, that the answer lies in the interaction between contexts, as shown in Figure 2.
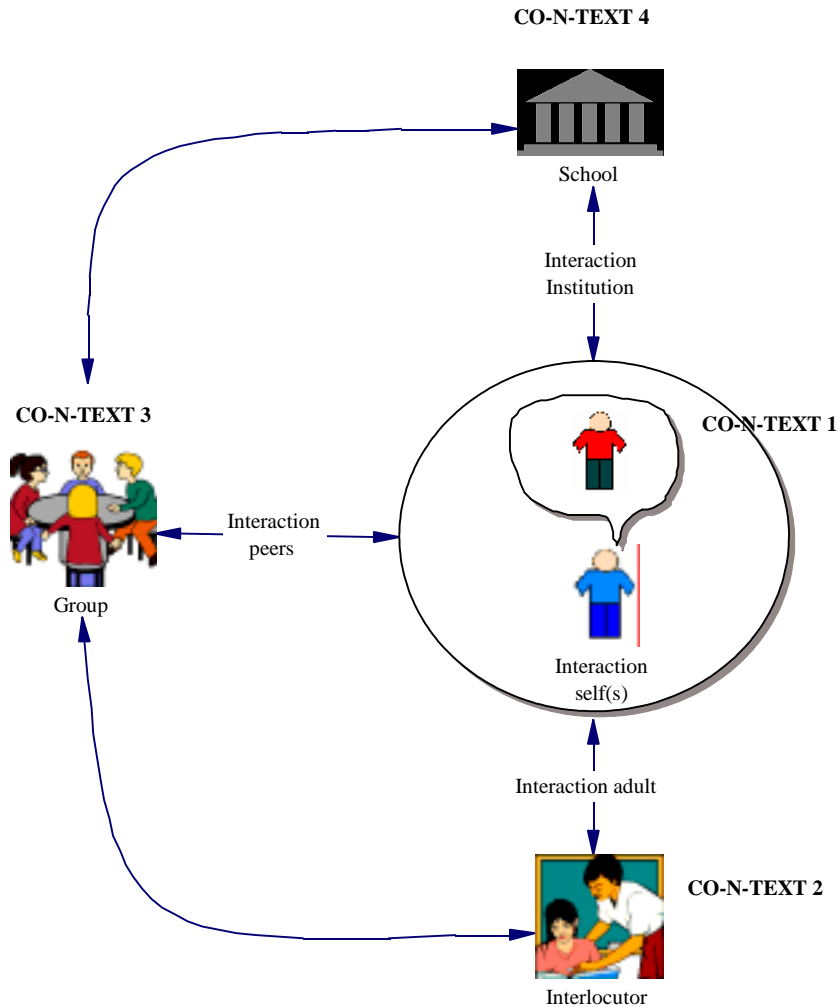
CO-N-TEXT 4

School

Interaction
Institution

CO-N-TEXT 3

CO-N-TEXT 1

Interaction
peers

Group

Interaction
self(s)

Interaction adult

CO-N-TEXT 2

Interlocutor

Figure 2. Interaction between contexts in the construction of strategic knowledge

Let us briefly describe each of these contexts.

Context 1: Intra-psychological personal. Although we label it "intra" because it takes place in the student's mind, it would involve inter-psychological activity since the

student would engage in interaction with some of his/her different selves or versions of self, and possibly with also other voices in representation of actors that have produced texts about the activity under way and that are resorted to at that moment. For instance, when students are at home about to do their homework, they can evoke their teacher's voice explaining the characteristics of the task they are working on. In the case of the teacher, the voices he/she could resort to when preparing a session could correspond, for example, to that of a colleague in the department or that of a recently read researcher. C. Coll and his team (Coll, Colomina, Onrubia & Rochera, 1992) explained this circumstance through the concept of interactivity that defines the articulation of teaching and learning activities between two or more interlocutors, whether or not present at the same place at the same time.

Context 2: Inter-psychological dyadic asymmetric. We restrict this context to asymmetric one-to-one relationships, where the partner usually has the role of tutor and/or monitor. Through verbal prompts or materials, the partner with the tutorial role would provide his/her interlocutor with psychological scaffolding in order to promote his/her progress from previous to new potential knowledge. In specialised literature, different forms of support and helping modes have been described in this area of development, particularly when it has to do with promoting strategic knowledge in students (Mercer, 1996; Perry et al., 2002; Veeman et al., 1999). Here we would include, apart from the classic teacher-learner interaction, other forms of interaction such as peer tutoring (Duran & Monereo, 2005), the parent-tutor interaction (Topping, 2001), or, for example, teacher-school psychologist or counselor interaction (Gutkin, 1999).

Context 3: Inter-psychological group symmetric. In this case, the interaction develops between peers when there is a common objective, and collaboration in small groups is encouraged, through previously structured dynamics, with explicitly or implicitly defined functions. Literature focusing on the promotion of learning strategies (and similar issues such as self-regulation and autonomy) indicates that both in collaboration and in cooperation modalities there is scaffolding between participants and the control of strategies is transferred. In this context, we would include students' group work (Topping & Ehly, 1998), but also that carried out by groups of teachers (Almog & Hert-Lazarowitz, 1999), parents or coordination and management teams.

Context 4: Inter-psychological institutional. This last context focuses on the interactions that take place with texts generated by the educational institution as a whole, as a historical-cultural body that has produced its own goals, norms and rules of behaviour, ways of distributing work, routines, protocols, etc., many of them gathered in institutional documents (the school's educational plan, curricular project, internal rules), and others that are implicitly in force in daily life and are just as capable of somehow regulating the behaviour of the educational community as the former. Both Leontiev's (1978) activity theory and more current developments by authors such as Engeström (1987) have pointed out the importance of studying educational activity systems as historically set-up, local practices.

Although what the "institution wants or expects from" its respective members may continuously influence other contexts (directly appealing to the school's guidelines or, for example, as a mental voice reminding us of previous conflicts with the school management team), there are institutional situations in which this tension emerges forcefully (e.g., staff meetings, assessment meetings, academic year opening and closing sessions, meetings with educational authorities, etc.). The project of the Benchmark School (Gaskins & Elliot, 1991) is a paradigmatic example of how a beneficial institutional context can favour strategic learning in students with severe learning difficulties.

As has been previously argued, the interaction between these four contexts is reciprocal and ongoing, and that is how we have tried to represent it in Figure 2. Of course, the impact of texts produced in the institutional context (4) cannot be compared to those produced in the personal context (1); however, we know that under certain circumstances (*status* of the actor, a special juncture, etc.), the text of an individual actor can contribute decisively to the redefinition of other texts in different contexts.

Due to space limitations and given the larger amount of publications dealing with contexts 2, 3, and 4, this article will focus on exploring the characteristics and consequences of context 1 in the construction of this kind of strategic knowledge.

Context 1: Constructing strategic knowledge through dialogue and adjustment to oneself

We are never alone, not even when we are on our own.

At this stage, there is no doubt that early interaction with other human beings allows us to construct, using Bruner's (1999, p. 12) words: "not only our worlds but also our own concepts of ourselves and our powers." In other words, early on we start to interiorize other people's speech and we start to talk to ourselves in a way similar to how people talk to us, thus establishing internal dialogues of different extension and quality (Vigotsky, 1989). In any case, this assimilation is selective and seems to depend on the emotional climate of the interaction. Grusec and Goodnov (1994) suggested that the internalisation of expectations, goals and adult models occurs effortlessly when the relationship with these models is supportive and emotionally positive; however, this internalisation is less smooth when the relationship is strict and based on criticism. Similarly, Grolnick, Kurowski and Gurland (1999) argued that the quality of the parent-child relationship promotes the child's sense of autonomy, their perception of competence and, most importantly provides children with fundamental systems of cognitive and emotional self-regulation for their school success.

How and when does this internalisation of models promoting autonomous learning take place? Do we also interiorise our interlocutors' concepts, emotions and strategies? Do we do so in isolation or do we articulate this internalisation in a coherent way with some kind of structure? Is this structure fixed or flexible?

In order to try and answer these questions, we will refer to three concepts which we feel must be incorporated into the paradigm of strategic knowledge and learning: cognitive and emotional context, construction of different selves, and strategic perspectivism. We will argue that a certain cognitive context can lead to alternative interpretations of reality, which, under some conditions, may turn into versions of one's own identity, or selves, that are associated with a set of problem-solving strategies and emotions that will be triggered jointly in certain social situations. A greater awareness of the cognitive-emotional packs that make up the selves would enhance strategic perspectivism, that is, the competency of identifying and anticipating strategies that other people resort to during communication exchanges.

Creating a "cognitive and emotional context"

Different authors interested in the role of social mediation in the cognitive development of children in their early childhood (e.g., Claxton, 1987; Nelson, 1981) have highlighted certain routines or prototypical scripts such as "time for a bath," "lunch time" or "nap time." In these routine contexts, there is an integration of similar actions and words, in delimited times and spaces, which the child quickly recognises and anticipates, but there are also elements of a more emotional nature concerning certain perceptions (smells, flavours, etc.), attitudes and sentimental expressions that are associated with these situations as well.

Gradually, the child not only establishes an association between this set of variables, but also learns to locate him/herself in this context, first as a passive subject of the adult's action, as an observer, but progressively as the protagonist, as someone that can perform a certain role in the script. This is when the child starts to rehearse certain "strategies," learnt from adult models, in order to achieve his/her personal goals (eating what he/she fancies, spending less time in the bath, going to bed later, etc.). These strategies can adopt different forms, within a range of possibilities (resistance, aggression, self-aggression, seduction, deception, negotiation, etc.) and, of course, they can have different effects and responses by the different care-givers that help the child to create biographical narratives he/she will interiorise selectively, transforming them into autobiographical narratives, which are contextually located and which are not always coherently linked between themselves.

However, these different selves would be insufficient to structure a mind capable of adjusting to change. Without a representation of identity that provides the subject with a sensation of unity and continuity, these competing versions of oneself could result in an indecisive, changeable mind, unable to make choices, such as the one described by Damasio (1995). According to this author, this sensation of identity has a biological basis founded on the capacity of the organism for continuous "self-observation and self-representation" and, therefore, for recognising itself in the different "films" it elaborates about itself when interacting with others.

It is this dynamic game, produced by this sense of identity (being oneself) and these constructed selves, that constitutes the cognitive and emotional context, essentially, context 1. This game takes place in the privacy of our mind but involves a constant dialogue between a varying number of selves that allows the child to interpret what others do, say and want, and to start making more or less strategic decisions based on this interpretation. The episodes of private thinking "aloud," common in 3-4 year-old children, show these dialogues with another self that help them express, describe, reason, argue, or solve problems.

Other external voices are often incorporated into these dialogues: those of parents, family members, teachers, friends, but also those of fictional characters created by literature or mass media, or recreated by the subject him/herself. Some of them will subsequently follow a process of internalisation, producing new forms of thinking, action and emotion; new selves that will become an active part of the cognitive context. Authors such as J. Wertsch (1991), partially adopting Bakthin's ideas, have referred to the voices of mind that accompany and guide us from childhood. When thinking, for instance while intentionally planning a strategic action, we talk to ourselves, frequently incorporating different voices in an internal dialogue in which an author or sender and an audience or receiver intervene as in all dialogues. These different voices of mind or selves, as we will try to argue further on, have a social origin and are of crucial importance in the acquisition and utilization of learning strategies and problem solving.

The construction of multiple selves and associated strategies and emotions

Certainly, the idea that different voices, different selves, accompany us is not new. As pointed out in the previous section, we can construct different versions of our identity thanks to the interaction we establish with other social mediators, whether they are people or symbolic tools, within specific episodes. To use Burr's wording: "All the versions of our self are a product of the different relationships with others and all are equally real and right" (1985 p. 37).

More recently authors such as Hermans (2002) have also referred to multiple "internal actors" who, through self-explicative narrations, make up our self.

In an attempt to summarise the defining characteristics of the notion of the self, we can state that:

1.   The self should be considered a version of one's own identity. Therefore, the identity, as a general autobiographical narration that contributes to our existence with a certain structure of continuity (who I am, what I am like, what expectations I have, etc.), would be prior to the formation of selves. This would be coherent with Damasio's position, previously commented upon, or the more recent work of Burkitt (1999) on the subjective feeling of being a self, on the sense of being embodied.

2.   The self would contain a set of concepts, conceptions, expectations, strategies and associated emotions that would appear together when faced with certain social episodes, under the structure of an identifiable personal profile and a coherent text. Thanks to the influence of certain social expectations on the attribution of social norms of conduct in view of the status of the actor, some of these selves will be expressed in identifiable social roles. Notwithstanding, these roles will have a personalized characterisation determined by the self that is capable of activating the subject. Thus, as will be discussed in more detail further on, when confronted with the attribution of the role of "student", some children will, it could even be said intentionally, activate a self appropriate for the social expectations of students, and on the contrary, other children will not possess a self, with its corresponding strategies, suitable for this demand.

3.   Although one can build multiple selves, there are restrictions. In addition to keeping certain limits of coherence with one's own identity, as mentioned previously, they should have a certain consistency and they should be triggered similarly when facing similar episodes, and in many cases according to social roles. Another obvious point of restriction comes from the particular contexts of activity in which the subject develops. Whereas in certain cultural niches many and varied selves can be stimulated to face a wide range of situations, in other niches the constructed selves can be scarce and even practically non-existent. Markus et al. (1997) have referred to the ways in which a certain culture limits the possible number of constructions of self by using the term "self-ways". In their studies of how people belonging to Euro-American or Asian communities construct their selves, it is shown that the "ways of being a person" in these socie-

ties, the possible selfways, are culturally determined. For instance, being someone appropriate in the first community means being someone unique and independent, whereas in the second community it implies being part of a social group or network and establishing relations of interdependence within this group. The context will not just trigger a certain self, it will also re-construct it according to the specific requirements of the situations and under certain circumstances it might lead to the construction of a new self.

4.   A greater awareness of when a certain self is resorted to (we say to ourselves: *"now I should adopt my strictest side…,"* *"watch out, be kind but distant,"* etc.) would allow the subject to create strategic knowledge, that is, to acquire knowledge about what contextual conditions every self is efficient in, and would also enhance the introduction of changes in one's own self, by modifying or incorporating concepts, strategies, and emotions. On the contrary, a low awareness would result in the automatic triggering of the self, activating routine packs of thought, discourse, and action which, despite the safety they offer, are usually less context-sensitive and, therefore, less efficient, as will be observed later.

The above characteristics have consequences for both the current paradigm and for research on strategic learning.

Beginning with the latter, that is, research, some of the methodological tools usually used to identify students' strategies would clearly have limitations. Interviews, questionnaires, self-reports, and many Likert scales, which directly inquire about the subject's styles and preferences when studying, taking notes, sitting exams, etc., would only allow us to gain access with a certain reliability to the general autobiographical narration or, in other words, to identity. These questions could be summarised in one single question: What are you like as a student? (or, in the case of teachers, as a teacher). To gain access to the real learner-as-self, we should do so through indirect measures and always in relation to a social episode (whether induced by the researcher or not) that the subject considers to be real to all intents and purposes.

As for elaborating a more comprehensive explanatory framework, the inclusion of a context 1 where a dialogue between identity and selves would take place, and the

emergence of one of these profiles from which to adjust to contextual requirements, poses at least four questions that need to be answered (an exhaustive review of evaluation instruments can be found in Boekaerts & Corno, 2005).

Question number one: Which factor triggers the emergence of a certain self? If we consider positions such as Damasio's, the emotional states that certain episodes produce in us would trigger the self and its associated strategies. When faced with a social situation that produces tension and insecurity, such as an exam, we can activate a protective self that tries to act in a very controlled, meticulous and conservative manner, ensuring each movement and avoiding speculative or hazardous behaviours.

We also think that cognition and emotion cannot be dissociated easily and that every thought, discourse and action has, to some extent, cognitive-emotional qualities. A self can be activated both by a logical-analytical decision, although always with an emotional background (e.g., a teacher: "I can't connect with this group, tomorrow I'll try to get to know what they expect from this subject, what they'd like to learn about this subject") or by a certain feeling, although always together with rational elements (e.g., a student: "I'm nervous, this teacher wants me to give him information! I'll fob him off, or I'll change the subject, or pretend I'm deaf…").

At any rate, the final result, the strategy, cannot be seen only as the result of an individual solipsist decision: the context will be part of the intra-psychological dialogue re-constructing the subject's position in each situation.

Question number two: What level of consciousness and regulation does the self operate at? Another aspect, partly introduced, is that of the level of consciousness and regulation exerted on the self. When a teacher loses control of her class, or when a student is not able to understand what he is studying, they will probably resort, in a not very conscious manner, to simpler and more familiar selves.

Rozendaal, Minnaert and Boekaerts (2005) showed that teachers, when faced with unfavourable circumstances, easily fall back on their old teaching habits. In our example, he or she may adopt an authoritarian self consisting of dictating information, making students reproduce it, and applying rewards and punishments to their answers;

in the latter case, the student may resort to a "swot" self and memorize what he or she is studying, without necessarily understanding it, in order to be able to recite it later.

In other cases, however, a strategic teacher or student may consciously activate a certain self, planning intentionally which way of thinking is desirable, which feelings are preferable, and which decisions or actions are desirable in a given context. Thus, we would be talking of a continuum that ranges from situations where the self is triggered in an uncontrolled manner, to those where the self is triggered by the subject-in-context.

The reason why some people have acquired greater conscious control of their selves may be explained in the argumentative line proposed by Gergen (1989). According-ing to this author, we all try to make our discourses prevail, our own view of the facts; that is why, when presenting a construction of ourselves, we choose one that has a chance of being listened to, of prevailing. He writes: "(…) to justify one's own actions – that is, to offer a version acceptable within a certain social context- it is also essential to resort to different representations of the self" (p. 119). In other words, the selves are built up throughout the subject's history as far as they are useful for handling social situations and for gaining areas in which to exert influence. Some of these selves, as mentioned previously, will be constructed as the voices that accompany the execution of certain social roles; however, these roles do not impede the construction of other inde-pendent selves. In fact, authors such as Neisser (1997) distinguish different forms of self-knowledge depending on whether the subject is physically present in a determined context (ecological self), whether s/he is in an interpersonal relationship (interpersonal self), when the subject's autobiographic memory is involved (temporally extended self), when in a cultural context (conceptual self), or when based on their own mental and emotional life (private self).

In the educational field the self-as-learner is especially relevant, a kind of private self that is constructed based on personal perceptions of and external reactions to our position as learners, our strengths, weaknesses, usual customs in carrying out this social activity. Lin (2001) argues that changes in a routine educational structure (in her study of the introduction of a technological artefact produced in the USA in a school in Hong Kong) can strengthen the awareness of the self-as-learner and of possibilities to re-conceptualize this self.

Question number three: Should we acknowledge that each strategy is applied by a certain self? Indeed, the self may be conceptualized as a pattern or script for social performance that incorporates not only strategies, but also emotions, conceptions, discourse, expectations, and goals. As we always find ourselves in social contexts that we soon learn to recognise, responding to a demand from these contexts implies activating a self that we have previously constructed in similar contexts, or re-constructing it on the go based on other selves' resorted to in similar situations. Acting strategically implies, then, "reading" the requirements of these contextual demands correctly, and using the appropriate self (oftentimes in view of an expected social role), that is, those representations, emotions, practices and discourses that respond to our own expectations and goals, and those of the people around us.

This assumption may help explain the difficulty perceived when we have to interpret contexts which are different from our usual ones. For example, it might help explain the so-called "paradox of competence," in which students belonging to cultural minorities and disadvantaged classes seem to be lacking competence in the classroom while they seem to be very competent when solving problems of similar complexity in their developmental contexts. Our hypothesis would be that they have not had the opportunity to construct an appropriate self for this context. When the activated self is appropriate, then it is a question of adequately adjusting specific solving strategies, of resorting to self-regulation processes that, as we know, do not follow a linear, but a dynamic and recursive sequence. However, the main problem, as mentioned previously, is a void or maladjustment in the repertoire of selves.

So then, what happens when a self is activated that is inappropriate to a contextual demand? Let us look at an example. If a student is told to solve a school problem and, therefore, has to pay attention and be quiet, think of different alternative solutions and assess them, choose one and apply it, and give an answer when asked and, instead, this student activates a self related to a playful activity and starts acting before the teacher finishes explaining the activity, proceeds by trial-and-error, and gives possible solutions out loud, without being asked, then the teacher will probably tell him off. If this person is not offered help in the construction of an appropriate self, including relevant concepts, strategies and emotions, the outcome can be foreseen: the student will

either start a journey of progressive school maladjustment, or will partially modify his/her self and, although s/he may not carry out the tasks correctly, s/he will try to go unnoticed, to copy results, etc.

Question number four: What happens when there is only one univocal identity? Whenever we refer to strategic behaviour, we talk about a system of conscious supervision and regulation, able to introduce changes in a resolution process when the goal is being threatened. For this supervision to take place, at least one other "self" is needed to adopt the assessing role and to dialogue with the self performing the process (Antonio thinks: *"Antonio, you are not concentrating, your head is somewhere else"… "this is a dead end, you should look for another perspective" … "this is a good option, but now think of the cons" … "Yes, this is it Antonio!"*).

If this other self has not been constructed we can hardly speak of metacognitive processes, of self-regulation, at least conscious self-regulation, or of strategic learning. Actually, this metacognitive capacity, which seems to be one of the main evolutionary milestones of our species, will hardly develop without at least one other voice that observes what the self that is presently acting is doing.

Furthermore, one single self is clearly insufficient to approach the different social situations we have to face. A child that does not construct at least one self as a student, and keeps on behaving as a self in the role of a son/daughter or as a self belonging to a certain ethnic group, using its corresponding attitudes and strategies, will have serious problems of school adjustment. The development of multiple selves and their conscious management increases the capacity of adjustment and we could even argue that this leads to social integration and success.

At this stage, we feel that a clarification is needed: the fact that the self resorted to is context-sensitive does not necessarily imply that it submits to this context. When facing a conflictive situation (e.g., an out-of-proportion threat by a teacher to those who do not pass an exam), the activation of a self can be very adaptive (e.g., a student convinces all his/her classmates to answer the exam questions incorrectly), in terms of relevance to the context conditions; nevertheless, it could cause tension and could even give

rise to a crisis. In this sense context and self are never independent but rather interdependent. The self interprets the situation and the situation re-constructs the self. This is why we should always analyse the self-in-context.

As we have tried to argue so far, the construction of multiple selves and their conscious use have functional advantages over the idea of a single identity and, in addition, they allow us to develop highly flexible forms of analysis as will be shown in the following section.

Strategic perspectivism

We have always felt that Claxton's idea of children as precocious psychologists was thought-provoking. He stated that children, rather than being naïve physicians determined to find out how things work, are precocious psychologists interested in getting to know how the minds of the people around them work and, therefore, they usually explore the limits of their patience and tolerance.

Undoubtedly, other people are the most similar thing to us and, therefore, they are the best test lab to experiment with our conceptions, decisions and emotions, that is, our selves. In short, others are the ideal source to learn from and to help us learn about ourselves.

Besides, during this process of self-discovery through other people's eyes, we learn how to read the intentions of the people around us, a competency that, as Humphrey (1983) repeatedly reminded us, is of crucial evolutionary importance to our survival as a species:

"Before human beings could even start to calculate where their behaviour and that of others would lead them to, it was essential that they acquired a much deeper understanding about the character of the odd creature that occupied the centre of their calculations: man himself. They had to find a way to find out what men are like as such, how they react, what makes them act. They had to become sensitive to the others' caprices and passions, they had to notice their fickleness or perseverance, be able to read

the signs on their faces, and also the lack of signs (…) In short, they had to become 'natural psychologists.' The skilful man had to become a *Homo psychologicus*." (p.14)

The possibility of adopting someone else's perspective has been thoroughly studied in Psychology (Rodrigo & Correa, 1999), and the *perceptive perspectivism* that children have at an early age, as shown by their correct representation of how a person perceives a certain object, as well as the *conceptual perspectivism* through which adults can represent quite accurately how another person interprets a phenomenon have been analysed. However, little attention has been paid to the possibility of constructing a reliable representation of the strategies others resort to in order to achieve their goals, the so-called *strategic perspectivism*.

Undoubtedly, on many occasions we can infer, with varying success, what the purposes of our interlocutor are, and what plans and decisions s/he is developing to achieve them. However, we know very little about the kind of knowledge and cognitive resources required by such a useful but at the same time extremely complex competency.

We may argue that in order to understand the strategies of others we must have experienced a self that bears some resemblance to that of the other, thus allowing us to recognise the associated strategy(ies) and emotions. As has been observed previously, the possibility of establishing an internal dialogue with other voices that may advocate for different versions of one single event implies the opportunity to experience different emotions and discourses, and to try out different decisions anticipating their possible results and consequences. Therefore, it may be said that this type of intra-psychological test will promote inter-subjectivity and empathic processes when communicating with other people that show signs of feeling, thinking and acting in a similar way to some of the selves we have experienced.

Being able to put a voice to other people's thoughts is, certainly, advantageous, an advantage that can be used to manipulate or to better understand the reasoning of others, thus avoiding prejudiced and xenophobic attitudes. Vigotsky (1986) himself expresses this in an emphatic manner: "to understand someone else's speech, it is not

enough to understand their words: we have to understand their thoughts. But this is still not enough: we also have to know their motivations" (p. 253).

In a study by Hart and Fegley (1997) of a group of Afro-American adolescents in the ghettos of New Jersey, who were very active in their community, and another group of adolescents in a small rural community in Iceland, the first group demonstrated their ability to produce sophisticated self-descriptions of their beliefs and to understand different points of view. On the contrary, the adolescents from Iceland offered little self-referential information and had trouble distancing themselves from their points of view and comprehending other points of view. The authors interpret these results by high-lighting the positive influence of having had to face diverging perspectives and having had to defend an opinion through accessing and expressing one's own selves.

The mind, from this standpoint, may be said to work as a social lab in which different pseudo-selves are tested, personally elaborated or reproduced from others, and in which to decide whether or not to incorporate them into one's own structure without the social-emotional cost of rehearsing them in society from the very beginning.

The agenda that awaits us

As we have tried to argue in this article, we construct a choral self from birth which is at worst monophonic, at best polyphonic; a set of selves that allows us to rehearse the possible social impact of our decisions and to prepare for contextual demands. These selves must be considered versions of the personal identity that we multiply and consolidate thanks to interaction with other social beings and that incorporate scripts or mental models in the form of packs that are activated in more or less prototypical situations in our social, cultural habitat. Such scripts would be made up of constructs that allow us to interpret and explain these situations (concepts, conceptions, theories), to regulate certain associated feelings and emotions, and to act upon them (strategic use of learning and problem solving procedures). Finally, some of these selves, though not all of them, would form the basis of socially determined roles.

The internal dialogue between these selves, the dialogue between them and our own identity, and the roles adopted can achieve higher levels of consciousness so that

the subject can learn to determine which self should be activated under certain circumstances or in view of an expected role, thus creating an obvious advantage in the domain of social relationships.

In fact, we refer to a competence that goes beyond what Gardner (1999) calls "intrapersonal intelligence," engaged only in establishing an unvaried, supposedly true identity; it would be closer to what the DeSeCo project (Simone & Hersh, 2003) grouped under the heading of **"competencies to act autonomously":** the competence of knowing how to read context and the position we can adopt in it, defending and reinforcing one's own rights, interests, limits and needs, and, what seems more significant, elaborating and managing life plans and personal projects. The latter involves, in turn, the elaboration of a sense of identity from a certain narrative organisation of one's own life existence; elaborating personal plans and projects consistent with one's own more global life plans; selecting appropriate, necessary and available resources to carry out these plans; and self-managing and updating these plans and projects when necessary.

In our opinion, in order to acquire this competency in its full scope, one needs to develop an identity and an articulated, appropriate set of selves that may be managed, basically, in an intentional and purposeful manner. However, research into self-regulation processes cannot be carried out without considering the self that the student can activate at any given time. These processes cannot be seen as "clean" processes, that is, independent of our personal history and the situational and conjunctional elements that are operative at any given time. Undoubtedly, research is required to clarify what the exact nature of these selves is, how they are used by different people in different conditions, how they influence self-regulation processes and to what extent they can be eliminated, reconstructed, or replaced through educational processes.

Therefore, we feel that the research agenda we should commit to for the next decade ought to deal with some of the questions listed below:

First of all, how do people determine what context they are in and how do they prioritise the features of each context? As this paper has tried to demonstrate, contextual sensitivity is one of the fundamental competencies of a strategic pupil, of someone who is capable of adjusting to situational conditions.

This context, understood as "co-n-text," that is, text shared with others, must necessarily include these others; however, a distinction must be made between at least three kinds of voices that make up the others; a) those that are physically present during the interaction, b) those that the subject invokes vicariously and that belong to people other than the subject, and c) those that correspond to the different selves of the subject. This differentiation, fundamental to understanding the student's (and the teacher's) strategic and self-regulation processes invoke the consideration of new research concerns in Educational Psychology: how does one access the representations and, in particular, the strategic focus of the other people present? How are the different voices of one's own and of others activated and how is the (intra) mental dialogue established between them? How does this cognitive dynamic influence self-regulation of what we think, say, do and feel (strategic focus)?

In this paper we have defined potential advantages that derive from consciously regulating those intra-psychological voices, in particular those that correspond to versions or constructs of the subject's own identity—the selves. This leads to further questions: Which levels of consciousness can be identified in the administration of selves and how can progress be made in these levels? What advantages can be gained from regulating these selves consciously? Under which circumstances do students and/or teachers substitute one self for another? What is the cohesive link with the assigned social role?

Finally, another aspect highlighted in this article is the fact that some subjects hold a rich, permanent and conscious dialogue between their different voices or selves which can have a positive impact on different competencies of enormous socio-educational value, for instance favouring their conversational, interactive and collaborative abilities and hence augmenting tolerant attitudes towards other ways of thinking. In this manner, the mind would take on the role of a "forum" or "parliament" in which different arguments and counterarguments would be tried out, thus allowing different points of view and possible solutions for a given problem to be examined. A second group of competencies, sufficiently commented upon, would affect the strategic use of knowledge and the process of self-regulation. The possibility of mentally interacting with different voices, in the role of different interlocutors, must necessarily affect the

processes of planning and cognitive regulation of decisions and operations that we put into action to resolve a problematic or conflictive task. Research should aim to clarify the nature of this influence and, if its benevolence is demonstrated, how this influence may be strengthened.

We are convinced that the answer to these questions will neither be easy nor will it be achieved in the short term. However, we feel that it is not possible to meet the expectations that the educational community has placed on educational psychologists without incorporating the role of selves as entities that integrate socially-located emotions, strategies, practices, and discourses in the paradigm of strategic learning.

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