Learning Assessment in Portugal: Research and Activity Theory

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Abstract:
The author provides a global characterisation of research on the basis of six literature summaries covering practically all the research carried out in Portugal on learning assessment over the last three decades, by referring to some of the main findings. Most of the research was found to have used conceptions and/or actions and practices of the teacher as its item of analysis. Data was collected through surveys by means of interviews or questionnaires. The researchers rarely obtained information from classroom settings enabling them to relate fundamental *aspects* (e.g. tasks, students, teachers, processes, results). Such is the framework in which the importance of considering the classroom an item of analysis and activity system is discussed so that it is possible to understand teacher evaluation practices, particularly the changes that may occur in the classroom in a more systemic, comprehensive and profound manner. This gives way to a discussion on the ontological, epistemological and methodological grounds related to activity theory, which are at the root of an alternative rationality to positivism and certain forms of constructivism. The article ends with a set of reflections/recommendations for improving research in learning assessment and regarding the role activity theory can play in working towards improvement.

Keywords:
Learning Assessment, Research on Assessment, Assessment Practices, Activity Theory.

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INTRODUCTION

This article was planned and organised around two main goals. The first is related to sharing some of the characteristics and findings of research carried out in Portugal over the last three decades in the field of learning assessment with the reader. It provides a brief characterisation of general aspects of the research carried out, since a lengthy analysis of its findings has already been accomplished (e.g., Fernandes, 2006, 2007, 2008a; Martins, 2008). The idea was to produce critical reflection in the form of a text that would be informative and provide an overview of what has been done in Portugal. The second goal of the article is to discuss some of the main aspects of the Activity Theory so as to try to open research possibilities enabling us to understand the *things* that take place in the classroom in a more systemic and comprehensive manner, particularly in the fields of education, assessment and student learning. It is about conceptualising the classroom as an *activity system* so that the multiplicity of relations among its elements (e.g. students, teachers, artefacts, rules) may be better understood. This goal was motivated by the fact that the overwhelming majority of analysed research used actions and/or thoughts of teachers as items for analysis, ignoring, in almost all cases, the broad range of interactions at work in the classroom.

The article is split into three main sections: In the first, the more important aspects of research on learning assessment in Portugal over the last thirty years are discussed. In the second, a discussion is developed, whereby the main aim is to make possible the analysis of the potentialities of considering the classroom an activity system. Finally, in the third section, some conclusions and reflections are produced.

THREE DECADES OF PORTUGUESE RESEARCH ON LEARNING ASSESSMENT

The literature produced in Portugal in the field of student learning assessment has been studied within the scope of a project, which began in 2003 at the Educational Sciences R&D Unit of the University of Lisbon (Ui&dCE-UL). Up to the present moment, 4 sets of literature have been summarised: a) 59 articles published between 1985 and 2005 (Fernandes, 2006); b) 34 books published between 1981 and 2005 (Fernandes, 2007); c) 8 doctoral theses defended between 1992 and 2005 (Fernandes, 2008a); and d) 48 Master dissertations defended between 1994 and 2003 (Martins, 2008). This research line is still active, given the output of updated literature summaries that is constantly being produced.

Other researchers have revised the literature in the same field. Barreira and Pinto (2006) revised the following 43 pieces of work produced between 1990 and 2005: a) 8 articles; b) a degree thesis and a "research study"; c) 6 doctoral theses; d) 27 Master theses. Neves, Jordão and Santos (2004) analysed 46 studies produced between 1971 and 2003, among

which 37 Master dissertations, 1 doctoral thesis and 6 "research studies".

These 6 pieces of work (Barreira & Pinto, 2006; Fernandes, 2006, 2007, 2008a; Martins, 2008; Neves *et al.*, 2004) cover almost three decades and, although they differ in a number of fields (e.g., selection criteria of the literature used, goals, depth and scope, conceptual framework, methodological approach), they are all important references for consultation, as far as the literature produced in the field of student learning assessment is concerned.

In this article, I restricted myself to a discussion based on Master and Doctoral theses, as they represent most of the research developed in Portugal.

MASTER DISSERTATIONS

Research in the area of student assessment has been carried out on a regular basis in Portugal since the mid 90s, the period during which most universities initiated their post-graduate programmes in education. Over a ten year span — 1994 to 2003 — Martins (2008) identified 48 dissertations in which the main research theme was related to the non-tertiary assessment of student learning (It should be noted that more than 80 Master dissertations in this area have been concluded over the last 5 years — 2004-2008).

Most of the dissertations analysed by Martins (2008) were based on a secondary education context (23 dissertations) and the third cycle of primary education (10 dissertations). The others were carried out within the first 6 years of schooling, although only 4 in the first cycle (first 4 years of schooling). Barreira and Pinto (2006) analysed 18 dissertations that were developed in a primary education context, only 7 of which were first cycle, and 8 in a secondary education context. The entire 37 dissertations, analysed by Neves *et al.* (2004) were developed in 3rd cycle primary education and secondary education settings.

Most of the Master dissertations stem from research on conceptions and/or teacher evaluation practices, are of a descriptive and qualitative nature and are based on a case study approach. However, data was only collected from real classrooms in a very restricted number of dissertations with a view to researching assessment practices and the variety of relations in the specific context of subject teaching and learning. Data was collected by means of surveys through interviews or questionnaires given to the participating teachers. Mathematics, Sciences and Language, particularly Portuguese, seem, overall, to be the subjects in which most research was carried out.

Only two dissertations related to external assessment were identified, thus, indicating a significant deficit in research as a number of different critical issues regarding the external assessment of students (e.g., analysis of results and items, difficulty levels, feasibility, validity, curriculum consistency, nature of issues, relations with internal assessment, relations with education, effects on teaching practices and assessment) demand further understanding. In other words, no systemic research has been carried out with regard to exams, which influence the academic progression of students, or in terms of assessed tests, that have absolutely no effect on the classification and academic progression of students. Curiously, a remarkably high number of research studies exist which analyse the legal norms and how they are put into practice by teachers and schools.

The research carried out within the scope of the Master programmes gave rise to the following results, *inter alia*:

1. Formative assessment practices are nowhere near becoming a part of school education. Most teachers acknowledge their importance in helping students to learn, but use a diversity of arguments to justify the inconsistency between their conceptions and practices (e.g., lack of training, the need to get through the programme).
2. Assessment is basically the teacher's responsibility. There are few research studies that highlight the sharing of assessment processes among students, parents, teachers and other participants.
3. Assessment is still not a very transparent process. By rule, criteria for assessment, correction and classification are not specified or made clear to students.
4. Assessment tends to be fairly loose and not particularly diversified. Tests take priority. It was possible to establish the use of alternative forms of information collection in a reduced number of cases.
5. Assessment is mainly regarded as a measure or means of verifying whether aims have been met

or not. Assessment with a view to learning or improving is something only a minority of teachers seem to understand and put into practice.

These findings have brought about reflection and given rise to a number of questions which, although not pertinent to the context of this article, may be viewed in the above-mentioned summaries of the literature.

DOCTORAL THESES

As far as doctoral theses are concerned, it should be noted that 12 theses were completed over a 15 year span in which assessment was, to a certain extent, the object of research. However, only eight fulfilled the criteria defined in the research of Fernandes (2008a), namely taking non-tertiary student learning assessment as the main object of study. Out of the six theses analysed by Barreira and Pinto (2006), five were also analysed by Fernandes (2008a). Neves *et al.* (2004) analysed just one thesis. Most of the analysed theses were concluded between 2001 and 2004.

Seven of the eight theses have been strongly inspired by perspectives related to teachers' thoughts on their conception systems and relations with the respective practices. It should be stressed that according to the already identified Master dissertation pattern, hardly any of the researchers collected data through observation of teacher practices in the classroom. The approaches used in these research studies were interview and questionnaire surveys as well as documental analysis which are of a descriptive, analytical and interpretative nature and are almost all based on case studies.

Only one thesis included a secondary education context. The others were all developed in a nursery (one) or primary education setting.

It may be said that the findings and conclusions of the research carried out within the scope of the doctoral programmes are essentially consistent with those found in the Master programmes. Nevertheless, we have decided to focus on the following points:

1. Learning assessment does not occur in a continued and systemic manner; formative assessment is not very frequent and is based more on teacher intuition than on the deliberate and purposeful collection of information.
2. Teacher conceptions and assessment practices seem to be strongly dependent on the assessment culture of schools and society: in this sense the basic and continued training of teachers seem to have a limited impact.
3. Par excellence, the object of assessment is the knowledge of the curriculum material assessed by means of tests and other pieces of written work which make up the preferred strategies for evaluative information collection.
4. Education reforms have little impact on teacher practices and their professional awareness. Teachers are not in possession of a critical perspective on assessment standards since, by rule they are not familiar with their underlying principles. Perhaps this is why they believe that the main aim of the new assessment decrees is to increase the amount of bureaucratic work.

In short, it may be said that as far as the studied themes, methodological approaches and study objects are concerned, there are no remarkable discrepancies between Doctoral theses and Master theses.

THE CLASSROOM AS AN ACTIVITY SYSTEM

In the field of learning assessment research, some of the critical issues are related to the need for understanding changes in teacher practices and classroom dynamics. Over the last decade in particular, growing interest has developed in the research of formative learning assessment practices so that, on the basis of their understanding, their connection to student learning, to the regulation and self-regulation processes used and the nature of teacher feedback can be analysed.

The research approaches used by several authors (e.g., Black *et al.* 2002, 2003; Fernandes *et al.*, 1996; Stiggins & Chapuis, 2005; Stiggins & Conklin, 1992) have made it possible to outline the way teacher and student actions are characterised with remarkable detail. However, the classroom conceptions used — *communities of practice* (Lave & Wenger, 1991; Wenger, 1998), *figured worlds* (Holland *et al.*, 1998) and *complex social and cultural micro-systems,* defined on the basis of a multiplicity

of theoretical perspectives — have proven to be unsatisfactory as they do not seem to contribute to the research of essential changes or transformations that occur on the inside (Black & Wiliam, 2006; Engestrom & Miettinen, 1999). Indeed, they are good conceptual frameworks for understanding the continuities and regularities that take place in the classroom. However, they seem not to be so useful in the characterisation of changes which, for instance, are found in teacher practices.

Under such conditions, conceiving the classroom as an *activity system* may be the most suitable way of understanding the changes that can occur as, for example, unlike the *communities of practice* and the *figured worlds,* which seem to underline continuity, stability and regularity, activity systems manifest insecurities, tensions, disturbances and innovations which act as stimuli for change. In other words, activity systems seem to be better defined as complex structures in which balance and predictability are an exception and in which instability seems to rule (Black and Wiliam, 2006).

On the basis of these assumptions, we will now go on to discuss some of the aspects that contribute to conceptually framing the vision of the classroom as an activity system.

BASIC GROUNDS OF ACTIVITY THEORY

The ideas defended by the Activity Theory are increasingly acknowledged in the academic community by those working in the fields of learning, education and assessment (e.g., Black and Wiliam, 2006), as the activity concept seems to open up new possibilities for understanding the changes that occur in the classroom. The key to this change seems to be found in *revolutionary practice* which can not be interpreted in its limited and reducing political sense, but rather as a set of *practices and criticism* that are part of every day activities. However, the importance of the Activity Theory has also been reflected in education, by means of learning in practice communities; in the sociology of science and technology, with practice concepts and actor networks taking the most prominent position; in cognitive sciences, within the scope of situated and distributed cognition and also in psychology, through interest in contextual and cultural theories.

The main grounds of the Activity Theory stem from the work of the Russian and Soviet historical and cultural school of psychology in the early twentieth century, through the work of Vygotsky, Leont'ev and Luria; from the pragmatic philosophy of John Dewey and Wittgenstein; from the philosophical and sociological works of Marx; from the ideas of classical German philosophy (from Kant to Hegel) and from the ideas of Friedrich Engels (Davydov, 1999; Engestrom, 1999; Engestrom & Miettinem, 1999). As far as Engestrom and Miettinen (1999) are concerned, the Activity Theory should be viewed as a broad and novel approach to dealing with theoretical and methodological issues that extend across social sciences such as: a) the relationship between micro and macro analysis levels; b) the nature of the cause and explanation. In the former, any local activity (e.g., classroom assessment practices) can be mediated by cultural resources and historically formed artefacts that are common to society as a whole. Therefore, networks among activity systems actually trigger artefact movements which are transformed by a number of combinations and reconstructions and are used in local activities thus, being both unique and general, momentary and durable. Hence, such duality between the micro and macro analyses of social phenomena is, to a certain extent, eliminated given the fact that local activity (micro) is mediated by artefacts and resources that exist in society (macro) and there are transitions between these two levels.

In the second case, the linear cause and effect concepts inherited from classical physics have proven to be unsatisfactory in the process of understanding social phenomena characterised by a complexity of elements that interact systemically with each other. From the perspective of scientific and technological sociology, the *co-evaluation* principle of social, material and technical factors is tending to replace the mono causal explanations of interesting phenomena. On the other hand, in developmental psychology, *co--construction* is its main explanatory principle. Thus, the need for a new, more sophisticated analytical unit has emerged that will open the way to research in interactions and complex social relations.

The most important challenge confronting the theory is being able to conceptualise the ever--changing activity concept, so that it is defined and

shared by a multiplicity of voices. Engestrom (1999) refers to the fact that it is not a closed and artificial theory associated with monism, since it has to reflect upon the complexity, mobility, wealth, contradictions and instability of contemporary societies.

In any case, the main challenge of the Activity Theory lies in understanding the dialectic relations between the individual and social structure.

THE ACTIVITY CONCEPT

Activity started out as being considered an essentially abstract concept, however, after its accomplishment it led to the creation of a general theory on the development of society and its specific aspects (Davydov, 1999; Engestrom & Miettinem, 1999; Lektorsky, 1999). Nowadays, despite the idea that activity is related to the production of utensils, it is also believed that it is mediated by artefacts (e.g., other utensils, symbols, signals, language) and also by individual-individual relations. Hence, the activity is of a cultural and social nature that is conveyed through its relationship with the object and, thus, is not restricted to an individual psychological source.

In the opinion of Davydov (1999), activity is the only possible form of existence, of the historical and social evolution of individuals and is always developed within the social, material and psychological relations they establish among themselves. As far as this author is concerned, activity is also associated with the transformation of reality, whereby the sociological and historical perspective, focusing on different types of work as well as its historical development, forms the basis for its understanding.

Engestrom (1999) sums up the dimensions of the activity concept with three crucial questions:

1. How can the structure and dynamic relations of an activity system be modelled?
2. Bearing the diversity and multiplicity inherent to human activities in mind, how can historicity and development be included in the theoretical analyses of activity?
3. What is the most suitable type of methodology for research into the Activity Theory, bearing in mind the need for bridges to be established between the basic and applied and between conceptualisation and intervention?

The answer to each one of these questions touches on the idea of *mediation* which is developed by a number of instruments, symbols and signals. Mediation is not simply a psychological concept, but rather an idea that *knocks down the Cartesian walls* that isolate the human mind and thought from culture and society (Engestrom,1999). From this perspective, human beings control their behaviour *from the outside,* creating and using a wide range of artefacts and not *from within,* on the basis of biological mechanisms. This means that the artefacts have an irreplaceable role in the development and cultural evolution of human beings.

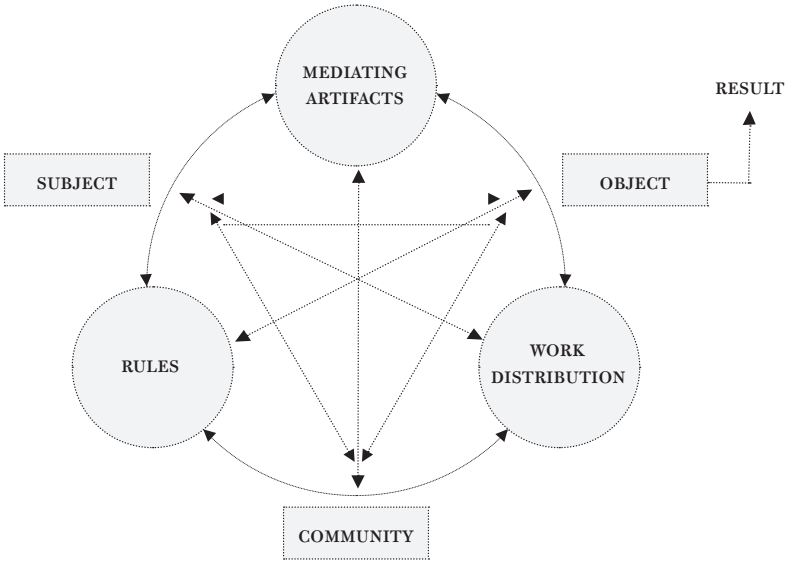
ESSENTIAL ASPECTS OF AN ACTIVITY SYSTEM

According to Engestrom (1987) and Cole and Engestrom (1993), the main aspects of an activity system are: a) the *object* that forms the element towards which human activity is directed and transformed into results with the aid of physical and symbolic and external and internal thoughts; b) the *subject* who is the individual or group of individuals whose actions are considered interesting from an analytical point of view; c) the *mediating artefacts* which are the cultural resources, knowledge, instruments and conceptual tools considered necessary for activities to be developed in terms of transforming the object; d) *rules* referring to all kinds of norms, conventions and regulations that are relatively flexible, are both explicit and implicit and which condition, restrict and regulate all the actions and interactions that take place within the activity system so that the object may be projected in the results; e) the *community* is the aspect that brings together a large and varied number of individuals who are, to a greater or lesser extent, organized, contextualized, united and who share or are interested in the same object; f) the *distribution of work* which involves dividing tasks among members of the community, making sure the participants understand their roles through which they may become more familiar with their field of action, particularly in their relationships with others, with the artefacts and with the object.

Figure 1 represents an activity system (Cole & Engestrom, 1993; Engestrom, 1999). An analysis of the Figure shows that the main issues regarding the Activity Theory are related to the object, by means of which the individual action of each *subject* is

related to collective activity. The result is conveyed through new forms of intervention (e.g. new types of learning) that are transferable, to a higher or lower extent, and are consolidated and permanent. The activity developed, whatever it is, it is motivated by an urge to see the object reflected in the result, thus, giving meaning to the action of each and every individual.

FIGURE 1. REPRESENTATION OF AN ACTIVITY SYSTEM



Adapted from Engestrom (1999, p. 31).

An activity with this type of composition contains ingredients for generating tension and contradictions that may lead to development and change. On using the activity system as an item of analysis, complementariness is established between the more objective vision on the part of the system and the more subjective vision on the part of the individual. The researcher constructs the activity system as if he were looking at it from above but, at the same time, by selecting one or more subjects involved in the activity that is developed on a local level, he/she is constructing an activity system seen through his/her own eyes and interpretations. So, a dialectic is established between the subjective and systemic perspectives, immersing the researcher in a dialogical relationship with the local activity he/she is investigating.

The model seems to suggest that one should start off with an analysis of individual action and move on to an analysis of its broader activity settings so as to return, once again, to individual action. The nature of human action makes its understanding and explanation difficult, since it is neither easily predictable nor totally rational; even better planned actions are subject to flaws, ruptures and even unexpected innovations. Therefore, analysis of activity systems can contribute to an understanding of the contradictions at the root of the detected flaws.

Engestrom (1999) stresses that it may be preferable to regard society more as a network of overlying activity systems which inter-relate with each other and less as a pyramid of rigid structures that depend on a single, isolated nucleus of power.

CYCLES OF EXPANSION

Cycles of expansion enable us to understand the evolution of activity systems (e.g., classrooms, schools, hospital services, hospitals, societies), through the identification of time periods marked by innovation, transformation and change or by cultural reproduction and/or the learning of innovation produced therein. The concepts of internalisation and externalisation are fundamental to the

understanding of cycles of expansion (Cole & Engestrom, 1993; Engestrom, 1987).

While through internalisation people are limited to reproducing culture, externalisation enables them to create and transform realities. So, in an activity system, the beginning of a cycle of expansion is fundamentally based on the internalisation, socialisation and development of learning development so that those who have not yet acquired such knowledge may come to master the activity as it evolves. Externalisation emerges with sporadic individual innovation. As tensions, contradictions and breaks in activity become more obvious and demanding, internalisation takes on critical self-reflection and externalisation, or rather, a search for solutions becomes more frequent. The externalisation process reaches its peak when it emerges and a new activity model is put into practice. Once this new model has been stabilized, the process of internalising its shape and form becomes the predominant way of learning and developing once again.

In the past, the internalisation of cultural environments was the main focus of attention for the theorists of the Activity Theory. Externalisation, or the transforming construction of new instruments and forms of individual and collective activity, also took on a crucial role in the investigation of activity systems.

LEARNING AND ITEM ANALYSIS

Engestrom and Miettinen (1999) discuss two learning theories which, as is the case with the Activity Theory, give importance to contextualised and culturally specific practices and to the mediation of human activity through cultural artefacts. However, they all differ in terms of the item they consider for analysis.

In the *Socio-cultural Theory of Mediated Action* the unit of analysis is *individual action,* whereby the perspective of activity and collective practices that are not exactly reducible to a sum of individual actions may dissipate; indeed, collective practices should be regarded as a set of its own, detached from individual practices; there are, however, difficulties in the analysis of relationships between individual actions, orientated by aims or ends, and activity, orientated by collective motivation.

In the *Situated Learning Theory* (Lave and Wenger, 1991; Wenger, 1998) the item for analysis is called a *community of practice* which is broader and more comprehensive from a spatial and social perspective than the individual action defended by the socio-cultural theory of mediated action. However, the problem resides in the fact that in a practice community learning and development are conceptualised as a one-way movement, from the periphery (occupied by those who need to learn) to the centre (occupied by those who have already learned and are experienced in such practice). Engestrom and Miettinem (1999) mention the fact that what seems to be lacking in community practice is movement in the opposite direction, from the centre to the periphery, which generates innovation, criticism and change.

In the *Activity Theory* the unit of analysis is the *activity system.* All the activity developed therein is culturally and socially mediated and orientated by (and for) an object. Such a system makes it possible to overcome the problems of item analysis covered by other theories, since it articulates the individual with the collective, the objective with the subjective and, in general, is in a position to understand the complexity of the interactions and relations among the elements of its composition.

There is still much to analyse and reflect upon in terms of using the Activity Theory as a means to investigate and understand the complex set of questions raised by learning assessment. Can future research ignore this challenge?

CONCLUSIONS AND REFLECTIONS

PORTUGUESE RESEARCH ON LEARNING ASSESSMENT

The research carried out in the field of learning assessment seems to be relatively scarce (Fernandes, 2006, 2007, 2008b, 2008c; Neves *et al.*, 2004), as is the case in other fields of education (Estrela, Esteves & Rodrigues, 2002; Estrela, Eliseu & Amaral, 2007). Indeed, a summary of the research produced in Portugal in the field of basic teacher training shows that between 1990 and 2000, 21 doctoral theses were concluded in Portuguese universities (Estrela, Esteves & Rodrigues, 2002). This data helps to contextualise the above-mentioned data for the field of learning assessment. Furthermore, it seems to suggest that research production, in this and other fields, must be related to the recent institutionalisation

(approximately 35 years) of the scientific area of education in Portuguese universities.

Most of the research analysed in this article has examined the assessment conceptions and practices of teacher training. The practices, themselves, were studied on the basis of the discourse and narrative produced by the teachers involved. The vast majority of research analysed in this article has analysed teacher assessment conceptions and practices. There are very few descriptions of teaching, learning and assessment *environments* in the classrooms. Factors associated with the improvement of student learning or which help us to understand the difficulties of, for instance, putting a formative type of assessment into practice, have not been identified. Indeed, most of the analysed research does not really associate assessment, particularly formative assessment, with student learning.

As for listening to teachers' opinions, particularly in terms of their beliefs, conceptions and practices, a number of methodological and epistemological questions are raised that require reflection, such as:

- Can one say that the teacher assesses alone, even if he/she does not share the power to evaluate?
- Are the thoughts and actions of teachers the best item for analysis in order to understand what goes on in the classroom as far as teaching, assessment and learning are concerned?
- What role should be given to the students and other participants and to the tasks presented to the students?

The answers to these and other, similar questions may contribute towards re-conceptualising and re-constructing certain aspects of the research we have developed in Portugal in the field of learning assessment.

Research has to give us a lot more information on substantive and crucial issues regarding student learning assessment (e.g., the nature of formative assessment practices; relations between formative and summative assessment; relations among teacher practices, teacher assessment and external assessment; quality of assessment; classification processes; analysis of student results; student participation in the assessment process). We have to achieve more than simply the knowledge that a given number of teachers have erroneous conceptions regarding formative assessment, and use tests to collect evaluative information on what students actually know. It is relatively useful to know that most teachers have the perception that they need training in the field of assessment and present a variety of arguments to justify the absence of systematic formative assessment practices in their classrooms.

Nevertheless, it is important to mention that at this moment that the research produced in Portugal over the last few years has evolved considerably, giving value to empirical data and the more prolonged classroom *visits* and by studying critical questions such as: a) effects of secondary education exams on teacher assessment; b) relations between the pedagogical orientations of various school entities and teacher assessment practices; c) relations between the different types of feedback and student learning processes; d) relations between formative assessment practices and student learning processes (e.g., Ferreira, 2005; Mestre, 2007; Migueis, 2008; Véstia, 2009; Vieira, 2007).

So, it seems that a new phase that is overcoming some of the identified fragilities has been triggered. Indeed, these fragilities can not be disconnected from the difficult path the scientific field of education has followed in Portugal.

ALTERNATIVE RATIONALITY OF THE ACTIVITY THEORY

The discussion surrounding the Activity Theory proposes an alternative rationality, among other things, to that which has prevailed in the Western world since the 18th century. The most dominant conception is that all natural and social phenomena can, on principle, be totally controlled and manipulated according to human needs. The rationalisation of nature and society assumes a dualistic vision of social sciences and behavioural sciences; social and economic structures are studied on the one hand and, on the other, individuals, themselves. The social structures are considered stable, self-efficient and sturdy while individuals, despite the fact that they act, learn and develop, seem not to have any influence over them. This dualistic vision does not facilitate an understanding of the complexity characterising social transformations which are recognisably swift, profound and, to a large extent, unpredictable nowadays. Under such conditions,

no dialectic relationship is established between the individual and the social structure, which is central to the activity theory.

However, this new rationality has also emerged as an alternative to relativism and constructivism, since it does not reject the existence of an objective reality and considers it important to make judgments on surrounding phenomena. Engestrom (1999) is of the opinion that differences among cultures, social groups and fields of practice are not explained by relativists on the basis of the historical developments that may justify them. The conception underlying this position considers that, for example, all types of practices or thoughts are valid, thus, avoiding the formulation of judgement. It is obvious, however, that every day, in all fields of social practice, decisions are taken on the basis of judgements made about people, groups or institutions. It is an issue that has to be confronted by Social Sciences in order to find the means for making important practical decisions in a variety of domains.

From the perspective of the Activity Theory, it has been acknowledged that constructivism has emerged to question determinism and the objective representation of the facts that *exist on the outside.* However, the transformation of realities, namely knowledge, artefacts and institutions, seems to be more a result of the rhetoric used by its authors than of action or specific activity. Therefore, constructivism is viewed from a broader angle since people are believed to create and/or transform institutions through discursive actions and materials, orientated by a given object (Engestrom & Miettinem, 1999). In this sense, there seems to be a need for more social interaction within activity systems and between activity systems and less rhetoric text construction. In other words, more *concrete* research.

So, the activity theory proposes an alternative rationality to the rationality based on control and generalisation and to relativist rationality, although it is seemingly clear that from an epistemological point of view, it is much closer to the latter. In fact, natural and social processes are not regarded as strictly predictable things that can be experimentally manipulated and controlled; they have their own activity and the ways by which they are transformed may be unique and unpredictable. This means that many phenomena or social and even natural processes are particularly unstable and not susceptible to being described and understood by universal laws. Therefore, notions of individuality and particularity, traditionally associated with human beings, should also be taken into consideration in the field of natural sciences.

Along this line of thinking, human activity, or rather, specific aspects of the subjective sphere need to be taken into consideration, even when we are referring to research and considerations regarding natural objective processes. Thus, people are regarded as partners of the object processes and not as special beings who detach themselves from the objects of their action and cognition. This may mean that, in many cases, relations between the subjective and objective processes may be seen as forms of communication.

A FINAL NOTE

Reflection on the arguments presented in this article has led me to consider the following:

Student assessment has a profound pedagogical and didactic dimension hence, it must be rooted in the different contexts of school subjects. Consequently, a lot of research needs to be carried out in the classroom so as to focus more on the relations between assessment practices and the specific learning the students have to develop.

Research in the field of learning assessment should enable one to describe, analyse and interpret in detail educational environments and learning and classroom assessment, and to provide a sound study of the relations among its constitutive elements (e.g., tasks, students, teacher, processes, results).

In most of the analysed research, the thoughts and/or actions of the teacher were, invariably, the item of analysis. The Activity Theory proposes challenges in this field that involve regarding the classroom as an item of analysis, thus, making a systemic, comprehensive and profound vision of the phenomena in question possible.

The Activity Theory puts forward a diversity of heuristic instruments that are seemingly useful for acquiring in-depth knowledge on the activity system, namely the classroom. Such is the case of the cycles of expansions and their inherent internalisation and externalisation processes which may contribute to further understanding of the changes, innovations, resistances and whatever, in general, is less predictable.

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