DISCOURSE ANALYSIS APPLICATION AND THE SUPPORTIVE CONTEXT OF SELF-REGULATED LEARNING

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This paper is focusing primarily on theoretical and methodological aspects of adaptation the instructional discourse analysis in educational researches, summarizing experiences based on the literature of discourse analysis and outlining the role of the method disclosing the main features of classroom context that supports self-regulated learning. Supporting self-regulated learning can only happen and can be interpreted when there are intensive interactions among individuals and the social-context elements. The approach and methodology provided by the qualitative method of discourse analysis could be an appropriate tool for stressing out the importance of context in understanding self-regulated learning.

Self-regulated learning is briefly described as the process of one's self-motivation, when someone takes responsibility for their own progress, guiding, structuring and controlling their learning autonomously (Réthy, 2003:47). Self-regulated learning (SRL) became one of the most often researched fields of educational psychology in the last four decades. Despite its rich literature and the dozens of ongoing research projects in this field, it is a highly complex topic area which lacks unified definitions. Over the past two decades, researchers have struggled with the conceptualization and operationalisation of self-regulatory capacity, coming to the conclusion that there is no simple and straightforward definition of the construct of self-regulation (SR). The system of self-regulation comprises a complex, superordinate set of functions (Carver & Scheier, 1990) located at the junction of several fields of psychological research, including research on cognition, problem solving, decision making, metacognition, conceptual change, motivation, and volition. Each of these research domains has its own paradigms and traditions. Also, each research community focuses on different content and aspects of the SR process, addressing different components and levels of the construct. Scanning the most recent literature in educational psychology reveals several evolving models of classroom SR. Comparing the major SR models in education, Pintrich (2000) came to the conclusion that each model emphasizes slightly different aspects of SR: Corno, for example, emphasizes volitional aspects of SR, whereas Winne emphasizes the cognitive aspects of SR, and McCaslin and Hickey (2001) emphasize the socio-cultural aspects of SR. Nevertheless, all of the models share some basic assumptions. All theorists assume that students who self-

regulate their learning are engaged actively and constructively in a process of meaning generation and that they adapt their thoughts, feelings, and actions as needed to affect their learning and motivation. Similarly, models assume that biological, developmental, contextual, and individual difference constraints may all interfere with or support efforts at regulation. Theorists are in agreement that students have the capability to make use of standards to direct their learning, to set their own goals and sub-goals. Finally, all theorists assume that there are no direct linkages between achievement and personal or contextual characteristics; achievement effects are mediated by the self-regulatory activities that students engage to reach learning and performance goals.

An early defining moment in research on self-regulation was a symposium at the American Educational Research Association annual meeting in 1986 that was published in a special issue of Contemporary Educational Psychology (Boekaerts & Corno, 2005:201).

We can delineate two basic approaches of the concept based upon the rich literature of self-regulated learning developed in the last thirty years, so-called metaphors used by Paris and his colleague (Paris & Paris, 2001:96). One is the metaphor of acquisition, of learning new strategies and skills and then applying them in school. In this view, teachers know good strategies and students do not, therefore teachers must describe them and exhort students to use them. The second metaphor emphasizes "becoming" more regulated as students develop new competencies. In this view, self-regulation is a description of coherent behaviors exhibited by a person in a situation rather than a set of skills to be taught. Both metaphors of SRL may be useful because they focus on processes of learning, development, and instruction. Paris and Paris (2001) presume that children's understanding of SRL is enhanced in three ways (Paris & Paris, 2001:98): indirectly through experience, directly through instruction, and elicited through practice. First, SRL can be induced from authentic or repeated experiences in school. Second, teachers may provide explicit instruction about SRL. SRL instruction could emphasize detailed strategy instruction or it might involve increasing students' awareness about appropriate motivational goals and standards. Third, we believe that SRL can be acquired through engagement in practices that require self-regulation, that is, in situations in which self-regulation is welded to the nature of the task.

The topic of how students become self-regulated as learners has attracted researchers for decades. Some researchers conceptualize SR as a general disposition that students bring into the classroom, whereas others conceive of SR as a property of the person- in situation and attend to domain-specific self-regulatory skills that develop through experience within and across situations. For example, in the 1970s and 1980s, researchers emphasized the metacognitive aspects of SR and appropriate application of cognitive strategies. At that time, researchers conceptualized SRL as a relatively stable individual inclination to respond to a range of learning situations in a typical way, independent of the context (be it the classroom, homework, or job training situations). Questionnaires as well as structured interviews (and sometimes teacher ratings) captured regularities in students' reported use of *cognitive strategies* to learn, remember, and understand class material, as well as their *metacognitive strategies* for planning, monitoring, and modifying their cognition (Butler, 2003:42). As research on SR progressed into the 1990s, existing assessment instruments transformed into domain-specific and situation-specific self-report instruments, and motivation and volitional components were brought to the foreground. Nowadays education researchers have begun to evaluate students and classrooms experimenting

with curricular and teaching reforms following philosophical principles of social constructivism. Several SR theorists declared that co-regulation (i.e. social interactions with teachers and peers) shapes, even develops, the SR process in the service of learning and achievement goals and that, consequently, measurement instruments should capture the quality of social interactions as they evolve in classrooms (Boekaerts & Corno, 2005:207).

Besides the historical analysis, summarizing the researches realized in the topic of self-regulated learning emerges a strand of research that typically conceptualize self-regulated learning as an aptitude – "*a relatively enduring attribute of a person that predicts future behavior*" (Winne & Perry, 2000:534). They had tend to ask quantitative research questions and measure self-regulated learning with self-report surveys. Research from an event perspective focuses on individuals' engagement in specific activities, rather than averaged across multiple occasions (Perry, 2002:1). This line of research demands using research methods with a focus on producing rich description. Usually qualitative methods are well-suited for examining self-regulated learning as events because they involve rich, holistic descriptions, emphasize the social settings in which the phenomena are embedded, do not make assumptions about intra-individual stability, and are oriented to revealing complexity (Patrick & Middletown, 2002).

The supportive context of self-regulated learning

Social-cognitive classroom research involves examining how teachers influence the development of self-regulation through modeling, social guidance, and feedback. Socio-cultural approaches assume that self-regulation is achieved through social interaction and has multiple outcomes, academic and nonacademic, which are understood within context (McCaslin & Hickey, 2001). The development and support of self-regulation occurs through reciprocal interactions among individuals and social-context elements. As researchers move toward a more contextualized frameworks of self-regulation and view classroom learning as a negotiated process between an individual and others they aspired to employ appropriate methodologies for studying these complex social interactions (Yowell & Smylie, 1999). Important links between teachers' instructional responses and students' motivation and self-regulation also have been established (Perry & VandeKamp, 2000) proving that one of the most important element of the supportive classroom context is the teacher's scaffolding activity. During instructional scaffolding, the teacher supports student self-regulation, as needed, in three ways: (a) helping students build competence through increased understanding, (b) engaging students in learning while supporting their socio-emotional needs, and (c) helping students build and exercise autonomy as learners (Meyer & Turner, 2002:18). Discourse analysis could be a potentially powerful methodology for describing scaffolded instruction and its possibility for supporting students' development of self-regulation.

Discourse analysis – an interpretative approach and methodology

Why discourse analysis? Researching scaffolding requires methods that are situated in classrooms and can explore the complexities of teacher-student interactions. Discourse analysis is one of the principal qualitative method borrowed from sociolinguistic methodologies for exploring classroom interactions. Instead of following the experimental research paradigm, this line of research generally follows the interpretive research paradigm and draws on tools from interactional sociolinguistics (Lin, 2007:77). The linguistic and discourse turn in classroom and pedagogical research can be said to arrive in the mid-1970s to 1980s when educational researchers started to focus on analyzing the fine details of classroom interactions. Developing research methodologies to both understand and describe instructional communication has been a major topic in educational research literature. It includes studies that focus on different aspects of classroom phenomena, depending on the researcher's interest. Interesting as they are, the discourse analysis method employed in these studies tend to focus more on microanalysis of teacher-student communication/student-student interactions and relationships than on the holistic description and understanding of pedagogical practices and why they are difficult to change. Lin is classifying the classroom studies into two main types (Lin, 2007:78). The first type has generally the concern of describing pedagogical practices and differentiating the effective from ineffective ones, by reference to some educational principles or norms, and usually they are undertaken by researchers with a background in educational psychology. The second type, how she defines, has the research concern of describing classroom interactions and practices "to find out first and foremost how classroom participants are doing what they are doing, with the applied aim of uncovering why they are doing it". This second group of research studies is usually undertaken by interactional sociolinguists, school ethnographers, or conversation analysts with an interest in analyzing interactions in educational settings.

Some of researchers have got interested about the way of successful participation in educational community, and they tried to look for answers to the question: "*What do teachers and students need to know in order to participate effectively in classroom lessons and other classroom context*?" through the examination the structure of classroom context (Mehan, 1989:119).

As Mehan defines, discourse in classroom settings and discourse in everyday life have many features in common (Mehan, 1989:125). Classroom lessons:

➢ are a member of the family of speech events: routinized forms of behavior, delineated by well defined boundaries and well-defined sets of behavior
➢ are like other speech events, interactional
➢ like other interactionaly accomplished events have sequential organizations, in which talking shifts from party to party as the event unfolds, and a hierarchic structure marked by recurrent behavioral configurations
➢ as in other polite speech events, speakers take turns, overlapping utterances are not highly valued and access to the floor is obtained in systematic ways.

However there could be made some distinctions between the discourse of everyday life and of classrooms (Mehan, 1989:126). The pattern of turn

taking is differing from the mechanism of normal conversation, which insures that one party speaks at a time, speaker change recurs and conversation is accomplished with precise timing. Contrary to this in classroom the teacher is, who allocates turns by identifying students by name, setting up recyclable and automatic turn-allocation procedures. While speaker allocation is open for negotiation at the end of each turn in everyday conversation, in educational discourse the floor is open for negotiation only at certain junctures, furthermore teachers not only allocate the floor, they take it back at the end of a student's reply. The sequential organization has different characteristics in everyday conversation and classroom discourse. The two-part sequence is one of the basic building blocks of everyday discourse (initiation-reply), while three-part sequence is fundamental to educational discourse (initiation-reply-evaluation): the evaluation act is qualifying the completion of the immediately preceding initiation-reply pair. The third element of sequential organization could be connected to the social distribution of knowledge among teachers and students: teachers know things that students do not know. It could be also a function of the teacher's role: teachers are responsible for judging the quality of student's performance.

One of the central concerns of discourse analysis in educational settings has been to uncover the ways in which talk at school is unique and thus what children must be able to do linguistically in order to succeed there. A next wave of researches based to the IRE (initiation-reply-evaluation) model previously described revealed that communication in classrooms frequently proceeds in ways that do not follow the sequential, reciprocal model of interaction between teacher and students, but demonstrates a complex ecology of social and cognitive relations (Adger, 2003:505). Consequently successful participation in a whole-group lesson requires responding with a correct answer in the appropriate interactive moment. The rise of discourse analytic study of educational settings is a part of a broader embracing of qualitative study in a domain long dominated by behavioral theory and quantitative research methods, and contributed to the discovery of unexplored research topics in this field (Adger, 2003:507). Discourse analysis scrutinizing classroom interaction has found evidence of poorly matched cultural and social norms that contribute to inequity. In addition, a number of studies have focused on the processes of literacy development and second language learning. More recently there has been significant use of discourse analysis to discover the mature of cognitive development in social space.

Socio-linguistic methods highlight the "*mediational role of discourse and joint activity*" and explore the multiple levels of context through language, which "*weaves the fabric of classroom culture*" (Hicks,1996:55). Consequently if we consider discourse analysis like an approach, we talk about language defined as a constructive social action with specific cultural patterns. Discourse analysis approached as a methodology aims to explore a discursive praxis about a specific theme, technically is about qualitative analysis of everyday speech situation carefully recorded and transcribed. Gee, Michaels and O'Connor (1992:228) argued that the application of discourse analysis to the study of educational processes involves the following set of assumptions: (1) Human discourse is rule-governed and internally structured; (2) it is produced by speakers who are ineluctably situated in a socio-historical matrix, whose cultural, political, economic, social, and personal realities shape the discourse; and (3) discourse itself constitutes or embodies important aspects of that socio-historical matrix.

Nevertheless discourse studies are conducted in a variety of different disciplines with different research traditions and there is no overarching theory common to all types of discourse analysis (Gee, Michaels & O'Connor, 1992:228) we could appoint some basic methodological steps / phases that researchers using discourse analysis should take into account. The first step in discourse analysis is to identify the underlying research questions which will guide the phases of design, data collection, data analysis and interpretation (Forman & McCormick, 1995). The data collection phase offers many choices of techniques: video-and/or audio taping, participant observation, field notes, informal interviews, elicitation tasks, and diaries. When data are collected in an educational context, background information about the school environment, daily schedule, participants, and lessons is needed. This background information allows the data collected in a naturalistic setting to remain contextualized--a crucial consideration of any qualitative research method. Data analysis is the third phase of research. Because of the large quantity of data typically collected, data reduction is necessary. The reduction of qualitative data involves selecting, simplifying, abstracting, and transforming the data. Another aspect of data analysis involves displaying the information in a manner that facilitates interpretation. In discourse analysis, a transcript is created to freeze the discourse. A preliminary coding system may be developed at this point based on previous research or on impressions of salient events by the researchers and/or participants. The final phase of discourse analysis, data interpretation, is again dependent on the theoretical suppositions and research questions of the study.

The adaptation of discourse analysis in researching self-regulated learning

Meyer and Turner (2002) present a vivid description of adaptation the discourse analysis methodology for analyzing the instructional scaffolding practice supporting self-regulated learning. Their paper presents excerpts from mathematic lessons to illustrate how instructional discourse patterns reveal contexts that support self-regulation and also displays the coding and analyses of qualitative data (Meyer & Turner, 2002:20).

The classroom discourse was analyzed by the following coding scheme: teachers' scaffolded responses were placed into three categories:

1) scaffolding understanding through negotiation of meaning of key concepts (e.g., types of angles) and related procedures and skills (e.g., measuring angles).
2) scaffolding autonomy through supporting student strategy use (e.g., illustrating different approaches) and transferring responsibility to students (e.g., asking students to model).
3) scaffolding a positive classroom climate for learning through support for students' intrinsic motivation, emotional well-being, and peer collaboration.

Non-scaffolded instruction was coded into two broad categories:

1) of teacher-controlled responses and
2) non-supportive motivational or socio-emotional responses.

These coding categories for instructional discourse were used to analyze the transcripts, which resulted the identification of each teachers discourse patterns of whom scaffolding practice was observed. A teacher discourse

pattern could be defined supportive or non-supportive based on those discursive practices, by the help of the teacher builds up a supportive classroom climate, competence, understanding and autonomy in the classroom.

Summary

Discourse analysis is a laborious and evolving research methodology. One of the major advantages of discourse analysis is that it allows researchers to capture very complex episodes across several classroom instructional contexts. Despite of the specific and unique approach of discourse analysis usage in exploring the peculiar impact of the context elements to the development of self-regulated learning rarely we can find a detailed methodological description outside the Meyer and Turner (2002) aspiration presented above. At the same time the cues for the practical application of discourse analysis are not sufficiently detailed, accordingly researchers have to develop their own reference points and coding structures, perhaps that is why this very exiting method is used so infrequently for examining self-regulated learning. Even so it is important for educational researchers to investigate constructs like self-regulation from different theoretical perspectives and examine them with different research methodologies. A socio-cultural perspective, which provides a framework for constructs like scaffolding and supports methodologies like discourse analyses, can help to explain self-regulation in compelling ways. Discourse analysis could offer a new insight into the analysis of classroom context in the research of self-regulated learning and the culture of learning.

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