MONTSERRAT CASTELLÓ and CARLES MONEREO

STUDENTS’ NOTE-TAKING AS A KNOWLEDGE-CONSTRUCTION TOOL

ABSTRACT. Note-taking is the hegemonic study activity at university and, in many cases, the main ground for educational interaction between teacher and students. This observation has given rise to an increasing interest in studying students’ note-taking and its impact on learning. In broad terms, three lines of research have been developed in the last 40 years: the effects of note-taking and note-rewriting on some cognitive variables (attention, memory, comprehension, and so on); the relationship between quality of notes and significance of learning; and the changes in the teaching methodology which may enhance note-taking. However, the consideration of notes as a symbolic mediator which in certain educational conditions may promote knowledge construction and transformation and, ultimately, cognitive change has received much less attention. In a preliminary study of descriptive nature we confirmed that in the context of our universities note-taking basically performed a register and external memory function with respect to the contents which were to be assessed by the teacher. Only a reduced part of the studied sample attached notes an eminently epistemic function, turning classroom sessions into truly learning situations involving a strategic use (that is, conscious and intentional) of the note-taking procedures using paraphrasing, inferences, analogies and other rhetorical resources. From the data collected in this study we initiated a research and educational innovation project in our respective universities which aimed at the modification of the instructional context so as to turn note-taking into a tool for conceptual change. These modifications had to do with basically three aspects:

1. Form students in the contextualised use of the different note-taking procedures so that they gradually acquired a “strategic knowledge” related to when and why a given type of note adjusted more suitably to the conditions of the note-taking context.
2. Turn students’ notes into a formative assessment tool through a process of external guidance and regulation carried out by the teacher with the objective of notes becoming a tool allowing for self-regulation of students’ own learning.
3. Establish note-taking teams in the classroom with the objective of promoting collaborative learning through the use of activities which emphasise interdependence and peer-assessment.

This text presents this project in detail analysing the results obtained and discussing the different degrees of influence which an intervention/approach such as the one outlined here may have on university teaching.

KEY WORDS: construction tools, formative assessment, guidance system, learning strategies, note-taking, strategic knowledge, university education
I. Introduction

Note-taking is the hegemonic study activity at university and, in many cases, the main ground for educational interaction between teacher and students. This observation has given rise to an increasing interest in studying students’ note-taking and its impact on learning. In broad terms, three lines of research have been developed in the last 40 years:

A dominant approach in the sixties and seventies focused on the effects of note-taking and note-rewriting on some cognitive variables, such as attention, memory, comprehension, and so on; these studies were initially aimed at distinguishing whether note-taking improved encoding or storage of information (Di Vesta & Gray, 1973).

In the eighties and nineties, interest was focused on the relationship between quality of notes and significance of learning (Monereo & Pérez, 1996; Shambaugh, 1994; Stahl, King, & Henk, 1991). More specifically, these studies analysed whether the use of different note-taking procedures improved the learning of some information. From this perspective, a clear distinction between note-taking procedures was established, identifying those allowing only for information repetition, others facilitating its elaboration, and those enhancing comprehension and restructuring of the content to be noted down. The latter type of procedure is the most useful to understand the ideas presented in class. Thus, students that use techniques or procedures to personalise notes, select, paraphrase and add personal information, are also those who show a better comprehension of content (Kiewra, Mayer, Christensen, Kim, & Risch, 1991; Lonka, 1997; Van Meter, Yokoi, & Pressley, 1994; Slotte & Lonka, 1999). Some of the research carried out under this perspective (Monereo & Pérez Cabani, 1996) also observed that the significance of learning was not so much determined by the specific technique used – mind map, literal notes, patterned pages, or interrogative guide – as by the conscious, intentional in-context use of the note-taking procedure; in other words, it was the mainly mechanical or strategic use of the note-taking procedure that had a relevant incidence on the depth of the information processing carried out during note-taking and, as a result, on the quality of learning obtained.

More recently, the interest of research has shifted to what really happens in the classrooms when teachers aim at promoting certain note-taking forms. Apart from showing the adequacy of some didactic strategies such as expository patterns or “note-taking tips”, these studies have highlighted the importance of teachers’ and students’ conceptions about note-taking, that is, the sense and functions they attach to notes. Closely related to certain methodological options, such starting conceptions will clearly influence