





Stylistics in teacher training: Research programs and future prospects

Ana Clara Ventura¹ CONICET y Universidad Nacional del Comahue, San Carlos de Bariloche

Argentina

Correspondencia: Ana Clara Ventura. Centro Regional Universitario Bariloche – Universidad Nacional del Comahue, Quintral 1250, CP 8400, San Carlos de Bariloche, Río Negro, Argentina. E-mail: ventura@comahue-conicet.gob.ar

[©] Education & Psychology I+D+i and Ilustre Colegio Oficial de la Psicología de Andalucía Oriental (Spain)

Abstract

The aim of this research is to analyse and systematize the conceptual and empirical bases of the available literature on research approaches, objects of study, and future prospects in the field of stylistics, in order to encourage best practice in teacher training. Three research approaches are presented: the empiricist-behaviorist approach, the rationalist-cognitivist approach and socio-cultural approach. However, these main streams are aligned in a nomothetic approach which falls short in explaining personal style as a framework for the identity of the teacher him/herself. To this end, we propose to delve into the dynamic and ideographic aspects of stylistics in teacher training, paying greater attention to the understanding and explanation of plasticity and movement through discontinuities, subtleties or loops, and several kinds of change.

Keywords: stylistics, teacher training, nomothetic approach, ideographic approach.

Reception: 04.01.16 Initial acceptance: 05.04.16 Final acceptance: 06.26.16

La estilística en la formación del profesorado: Programas de investigación y prospectivas

Resumen

El objetivo de esta revisión es analizar y sistematizar las bases conceptuales y empíricas disponibles en la literatura en torno a las corrientes de investigación, los objetos de estudio y las perspectivas futuras de investigación en el campo de la estilística que contribuyan al logro de buenas prácticas en la formación del profesorado. Se presentan tres aproximaciones: una de corte empirista-behaviorista, en la que se incluye la corriente presagio-producto; otra racionalista-cognitivista, dentro de la que tienen lugar diferentes aproximaciones (el pensamiento del profesor y la enseñanza adaptativa); y, una tercera de carácter sociocontextual y situada. No obstante, estas corrientes se alinean a un enfoque nomotético mostrando limitaciones para explicar los estilos personales como marcas de la propia identidad docente. Así, se propone incursionar en aspectos dinámicos e ideográficos de la estilística en la formación del profesorado poniendo mayor atención en la captura y explicación de la riqueza y plasticidad estilística a través de discontinuidades, sutilezas o bucles y diversos tipos de cambio.

Palabras Clave: estilística, formación del profesorado, enfoque nomotético, enfoque ideográfico.

Recibido: 01.04.16 Aceptación Inicial: 04.05.15 Aceptación final: 26.06.16

Introduction

Over the last decades, the study of the relatively stable modalities of teachers' ways of teaching, that is to say, of their teaching styles, has received special attention in the field of Educatonal Psychology within the framework of the so-called personal psychoeducational program (Beltrán & Pérez, 2011). An interesting aspect of this program, according to the authors, is that it attends both to the processes and to the needs of persons who teach and learn, and not to factors outside the education process.

Psychologists have made a distinction between two major approaches to the study of personality (Valsiner & Salvatore, 2012), which correspond to two great foci in the study of teachers' stylistics: on the one hand, the *nomothetic approach*, which attempts to find general laws about individual variations, combining the data of many persons; and on the other, the ideographic approach, which involves intensively studying individuality. In short, the nomothetic approach pursues structural aspects of stylistics through regularities and consistencies. By contrast, the *ideographic approach* examines dynamic aspects by means of capturing and explaining richness and plasticity (transitions, discontinuities, subteties, loops, and several kinds of change) in the creation of teacher' stylistics.

However, theoretical knowledge which has developed in depth in recent years has tended to have little impact on how professors approach their teaching practice (Álvarez & Hevia, 2013). In spite of constant updating of teacher training programs, Feixas, Fernández, Lagos, Quesada, & Sabaté (2013) asserted that discrepancies persist between theories and practice because professors tend to have other priorities as regards planning activities in the transfer of teacher training knowledge.

These authors put forward three major conditioning factors in the transfer of teacher training to practice: training, the environment, and the individual. In this study they proposed that the articulation of these three factors, bringing to fruition the transfer of teaching competences, may be integrated building on knowledge and reflection on stylistics and, in particular, on personal styles of future teachers, that is, their present styles and those they project into the future. However, in addition to the issue of transfer we face a stylistics field impregnated with

semantic confusion and the overextension of the construct, beyond whether or not adaptive and relational stylistics are dominant at the present time. This situation translates basically into two issues: on the one hand, the coexistence of fragmented and apparently disconnected conceptual development, and on the other, the absence of general agreement in the scientific community about the implications of stylistics in education (Ventura, 2015).

For these reasons, in this paper we propose to analyse and systematicize the conceptual and empirical bases available in the literature, around three axes: (1) strands of research, (2) objects of study, and (3) perspectives for future research in the field of stylistics which may contribute to the achievement of good practice in teacher training.

Stylistics in three research programs: presage-product, cognitive mediational, and sociocontextual

This section is organized into three parts which will examine the psychoeducational strands which gave pride of place to the study, conceptualization and assessment of stylistics: the presage-product program, the cognitive-mediational program, and the sociocontextal or situated approach. These different ways of understanding stylistics in teaching, although they share the general idea that teaching is not a fixed or unchanging object, differ in essential epistemological questions such as the more or less external character of stylistic patterns and the social or solitary character of this construct.

In general, different stylistic programs could be situated within a system of spatial Cartesian coordinates whose two axes are determined, respectively, by dialectic pairs of a structural-processual and mechanical nature (Figure 1), which leads to differences in how they are said to be constructed.

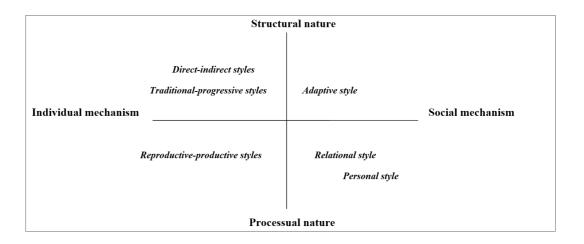


Figure 1. Tendencies in the stylistics of teaching. Source: Author

It is necessary to clarify that we will use the expression "research program" instead of the term paradigm. According to Shulman (1997), the notion of program retains a certain paradigmatic structure, and at the same time is different from it because it is compatible with the idea of absence of a single dominant paradigm in Social Sciences.

Style as the efficient behavior of the teacher: the presage-product program

The presage-product program came to light in the United States and reached its zenith between the decades of the 1960s and the 1980s. Its name comes from a conception of the teaching-learning act as an indivisible binomium. Teaching style was identified as one of the attributes of the professor that brought about the best academic performance in students (Brophy & Good, 1986).

The examination of teaching style focused on systematic observations in the class-room. In opposition to the perspectives that this program proposed as regards the direct teaching style (based on the teacher's authority and exposure to his/her ideas) being the most effective teaching method, Flanders (1970) attempted to justify the hypothesis which defended that the indirect style generates better performance and better attitudes in learners. The indirect style was characterized by the acceptance and praise of the teacher of students' expressions of

feelings and the development of their own ideas. However, results favoring only one teaching style were inconclusive.

Bennet (1976) identified twelve teaching styles on a progressivist-traditional continuum. At one end, teachers are characterized as organizing classes flexibly, showing little concern for control over the class and for performance, integrating contents from different disciplines, facilitating participative strategies, and showing intrinsic motivation. At the other end, traditional teachers are identified as organizing classes rigidly, showing great concern about controlling the class and about performance, focusing the lesson on a single discipline and on master classes, and expressing extrinsic motivation.

Over recent decades, these studies stopped centering exclusively on the effectiveness of the teacher's behavior in order to develop so-called Systems of Formative Assessment shared between professors and pupils. The most outstanding aims of this system are: to improve academic performance and student satisfaction, as well as to obtain information about how the formative process is evolving in terms of whether or not the behaviors of teachers and students fit into the planned program (Romero-Martín, Fraile-Aranda, López-Pastor, & Castejón-Oliva, 2014).

However, criticisms received by studies aligned to the presage-product program are based on certain limitations which it has in explaining underlying mechanisms between presage and product. Because of this, even when this program was at its height, the weakness of its behaviorist explanations, as well as the contractions and inconsistencies of its results, inspired a search for new directions founded on cognitive mediational models.

The teacher's style as a cognitive mediator: the mediational program

The cognitive mediational model shifted the object of study from observable behavior to cognitive processes in order to cater for mental mechanisms and representations underlying teaching and learning, conceived as independent processes. From this perspective investigation were conducted on the one hand, from the viewpoint of the teacher's thoughts, and on the other, from the focus of adaptive teaching.

Reproductive-productive styles as decision taking on the part of teachers

This trend was developed principally in the Institute for Research on Teaching at the University of Michigan in the United States through studies by Clark, Yinger, Peterson, Shalvelson, and Shulman, among others. Its name responds to the interest in the way teachers act, perceive, and cope with their professional work.

Clark and Peterson's (1997) model grouped the teacher's thought processes into three areas: (1) planification processes; (2) decision taking; (3) theories and beliefs. Within this framework teaching styles in the classroom were conceived as decision taking. The paradigmatic example of this position was the "Spectrum of Teaching Styles" (Mosston, 1990). This proposal considers decisions taken by teachers as the only unifying process which organizes: (1) students' activity; (2) the academic subject; (3) timing; (4) spaces; (5) materials and equipment; and (6) interaction between teachers and students.

This model has been revised, clarified and enriched at various times, and has progressively acquired a greater degree of international acceptance (Goldberger, Ashworth, & Byra, 2012). In its current version, the model is based on the axiom "Each deliberate act of teaching is the result of a previous decision" (Mosston, 1990, p. 40) and its structure is organized in accordance with decisions that take place in the teaching act grouped into three phases: pre-impact (decisions taken prior to the teaching act), impact (decisions taken during the same), and post-impact (a posteriori decisions). Building on decision-taking in these three phases about what and when to teach, 11 teaching styles were identified (Table 1).

Table 1. Principal axes and characteristics of the "Teaching Styles Spectrum"

Style	Central axis	Principal characteristics	
A	Commands	- Immediate response to stimuli.	
		- Precise and immediate execution.	
		- A previous model is reproduced.	
В	Practice	- Time is given for the student to carry out an individual task.	
		- Teacher has time to set up interaction with individual students or	
		with groups.	
C	Reciprocity	- Students work in groups.	
		- Answers are given immediately.	
		- Students follow performance criteria designed by the teacher.	
		- Socialization techniques are developed.	
D	Self-check	- Learners carry out their individual task.	
		- Students set up interaction circuits amongst themselves using criteria	
		developed by the teacher.	

Ε	Inclusion	 The same task is designed at different degrees of difficulty. Students decide the initial level of difficulty. All students must be placed at some level. Students decide when they have passed their level. 	
F	Guided discovery	- The teacher, by means of a specific sequence of questions, helps the student to achieve a previously determined objective, unknown to the latter.	
G	Convergent discovery	 The teacher poses a problem. The intrinsic structure of the task requires a single correct response. Students, by reasoning or by conducting other cognitive operations, discover the correct answer or solution. 	
Н	Divergent production	 Students give different answers to a single question. The intrinsic structure of the task entails many possible answers. Answers are valued according to possible procedures. 	
I	Design of individual programs on the part of the student	 The learner designs, develops and carries out a series of tasks organized into a personal program. The student selects the topic, identifies the questions, collects data, finds the answers and organizes the information. The teacher selects the area of knowledge. 	
J	Initiation on the part of the student	- The student initiates the style/s in which he/she will direct the episode or series of episodes.	
K	Self-teaching	 The student initiates his/her teaching experience, he/she designs it, carries it out and evaluates it. The student decides how and in what areas he/she must help the teacher. The teacher accepts the student's decisions and provides general conditions so that these decisions may be carried out. 	

Taking into account the above, these teaching styles were grouped into two major areas. The first, reproductive in nature, consisted of styles A to E (commands, practice, reciprocity, self-check, and inclusion), focused on the teacher's decision-taking that encourages the retrieval of learnt knowledge. The second, productive in nature, included the group of styles F to K (guided discovery, divergent discovery, divergent production, individually designed programs by the students, initiation of the student, and self-teaching), and promoted new knowledge based on decision-taking primarily by the students.

In synthesis, the classic perspective of the teacher's thoughts dominated the study of teaching styles as an expression of his/her decisions. However, these studies received criticisms on two fronts: on the one hand, the direct relationship between intentional/rational decision taking and actions, as well as the fragmented approach of judgement, decision taking,

theories, and beliefs; on the other hand, the growing distance between the study of teachers and the ever more robust research into the cognitive processes of the students.

The adaptive style as the teaching preferences of professors

So-called "adaptive instruction" (Corno & Snow, 1986; Kikas, Gintautas Silinskas, Jõgi, & Soodla, in press; Nurmi, Viljaranta, Tolvanen, & Aunola, 2012) is a movement which arose in the United States in response to the constraints of the presage-product program, to facilitate educational processes in the classroom. It posits that teachers adapt their way of teaching to the preferences of the learners. This instructional modality involves help that the teacher gives inside as well as outside the classroom to favor the learning of contents and skills (autonomy, competencies, relationships, etc.) in their students (Aelterman, Vansteenkiste, Van den Berghe, De Meyer, & Haerens, 2014; Grasha, 2002).

Instructional adaptation is preceded by a diagnostic process to identify students' learning preferences or individual tendencies to choose or favor one technique or a combination of several. Teaching interventions in the classroom strive to find a correspondence between teaching and learning styles. In its strictest and most well-known version, the so-called "matching hypothesis" assumed that when teacher' and learners' styles coincide, the effectiveness of the interaction between the two will improve students' learning significantly (Chowdhury, 2015; Zhang, Sternberg, & Fan, 2013).

Grasha's (2002) model combines teaching-learning styles with the following aims: (a) to describe the qualities of style in both groups; (b) to demonstrate how they relate to each other; and (c) to offer recommendations about how to enhance quality experience in the classroom. This model assessed the teaching styles of professors from the point of view of their behavior in the classroom. According to this author, five teaching styles may be defined: expert, formal authority, personal model, facilitator, and delegator. Grasha (2002) defied them as follows:

1) *Expert*: He/she is a teacher who has the knowledge and experience that students require. He/she maintains his/her status because he/she has mastery over details of the discipline being taught. Moreover, he/she challenges students by encouraging competition amongst them.

2) Formal authority: This professor maintains his/her status among students through his/her knowledge which he/she imparts in a structured way. He/she gives feedback efficiently to students based on course objectives, on his/her expectations and on the rules of the institution. He/she requires respect for established norms and regulations.

3) *Personal model*: This teacher believes that he/she is an "example for the students" and that through his/her own determination he/she will show them suitable ways of thinking and behaving. He/she is meticulous and organized, and by means of his/her person he/she will motivate students to emulate his/her own behavior.

4) Facilitator: This professor advises or guides students towards learning through alternative questioning and decision taking. He/she emphasizes students' development by seeking to nurture their independence, initiative and responsibility. He/she prefers project work or problem solving which will allow students to manage their own learning.

5) *Delegator:* He/she is a teacher who gives freedom to students so that they may become as autonomous as possible. He/she encourages students to work on projects independently or in small groups. The teacher is solely a consultant of the project.

However, we must point out that this modality is constrained by the fact that students lack a certain perspective which would enable them to use different styles in different contexts and situations. At the end of the 1970s, Witkin, Moore, Goodenough and Cox (1977) recognized that "for certain kinds of learning content a contrast in styles between teacher and student may be more stimulating than similarity" (p. 39). The authors argue that heterogeneity generates a great variety of viewpoints which enrich student learning.

In favor of the mismatch position, Doyle and Rutherford (1984) reviewed a number of investigations conducted in the United States and found that a mismatch between learning and teaching styles was more beneficial to achievement. The authors themselves were sceptic as regards "practical" considerations. For example, taking into account that learning styles involve different dimensions, how can the teacher know which one he/she should pay more attention to in order to adjust his/her teaching? Or how can he/she devise and manage a diversity of methods in such a complex environment as the classroom?

At the present time it is acknowledged that results have not led to conclusions in favor of or against matching, due to the constraints of the concept in the strictest sense (Zhang et al.,

2013), that is, the absolute "one-to-one" coincidence of student and teacher styles. These considerations inspired other kinds of empirical studies into learning styles and teaching styles in the university context. In this regard, researchers proposed to widen the classic version of matching or absolute adjustment of learning and teaching styles. In this way, some authors supported the idea that temporary mismatches in learning and teaching styles are very beneficial in the sense that they promote the use of learning activities that students would not employ of their own free will (Evans & Waring, 2012; Zhang et al., 2013).

In synthesis, the adaptive approach assumes that the value given to the student's determination requires the analysis of differentiating components of the professors' teaching as well as individual cognitive differences of the students. By contrast, the *sociocontextual approach* questions whether knowledge should be considered only as the manipulation of symbols in the mind, and whether learning consists merely of the acquisition of knowledge and skills. Cools, Armstrong, and Verbrigghe (2014) saw the need for designs that were more descriptive than experimental, with flexible hypotheses, thereby arousing interest in other objects of study: to what extent and in what ways learning and teaching styles are related in university classrooms. Extent and ways of relating that cannot be divorced from the context and discursive conditions of their productions or from the communicative intentions of the interlocutors.

The teacher's style as communicative exchange with students: the sociocontextual approach

The *sociocontextual approach* shifted our gaze from classic cognitive programs centered on the teacher, and focused it on the relational and contextual roots of teaching styles. This approach is relational because it assumes that teaching styles cannot be analysed separately or independently of the context in which educational practices unfold. Teaching processes, closely linked to learning ones, arise through discourse between teachers and students. Language is conceived as the meeting point between social activity and the individual cognitive world, knowledge being the result of human interaction situated in the classroom context which is conceptualized as a community of mutual learners (Medina, 2014).

The hierarchical relationship between action and cognition proposed by the cognitive mediational program, inasmuch as action derives from previous cognitive planning, has been questioned (Saxe, 2015). In this vein, more subtle viewpoints have arisen which understand that if teachers' actions are mediated by their ideas about learning and teaching, these do not

operate as pre-established steps in interactive decision making, and therefore they cannot be totally foreseen *a priori* (Pradas, 2010).

The notion of interactive style is defined by three main characteristics: relative stability, multidimensionality, and neutrality of appraisal. That is to say, it is not possible to value one teaching style above others in absolute terms (Hederich, 2013). Style is expressed as exchanges between teachers and students which shape interactive discourse in class. These exchanges are usually verbal communicative acts which may be considered as the "minimum unit" of discourse in the classroom (Villalta & Martinic, 2013). Communicative exchanges are analysed according to turn taking (the degree of protagonism on the part of the teacher) and ways of intervening on the part of the student (degree of cooperation). These turns and intervention modalities have been defined by other authors as interactive structures through which teachers and students relate to one another in the university classroom: expository, dialogues, discussions, among others (Prados & Cubero, 2013).

Ventura and Moscoloni (2015) showed that university students refined their learning styles throughout their studies, and tended to harmonize with the predominant teaching styles of their professors. So coordination arises between cognitive specialties and as regards sociostylistic relationships inasmuch as teaching styles accentuate certain students' styles more than others within each academic community.

In sum, communicative exchanges between teachers and students are considered as one of the most important ways of developing teaching contents and of favoring cognitive processes of mutual influence (Villalta & Martinic, 2013). So if professors teach in accordance with what they would like to learn and with the strategies they found most effective to enter into the academic community, it is therefore important not only to identify students' styles but also to take into consideration teachers' learning styles, to the extent that these preferences seem to have a bearing on their day-to-day teaching methods as well their on their views about learning (Ventura, 2015).

There follows a synthesis of dominant stylistics approaches in the Training of University Teachers at the present time (Table 2).

Table 2. Synthesis of dominant Stylistics Approaches in the Training of University Teachers at the present time

RESEARCH	ADAPTIVE STYLISTICS	RELATIONAL STYLISTICS
Psychoeducation- al tradition	Mediational program focused on the teacher's thought.	Sociocontextual approach fo- cused on the relationships be- tween teachers and students.
Question	Which instructional method (match vs. mismatch of teaching-learning styles) is more effective in students's academic performance?	How are learning styles and teaching styles linked in the education context? Do these relationships lead to harmony or to discrepancies?
Design	Experimental design with control group.	Descriptive correlational design with surveys used as a method of observation.
Variables	Manipulation of teaching variables. Control of external/contextual variables.	Measurement of learning and teaching preferences. Analysis and relationships among predominant stylistics profiles.
Findings	Conflicting results. Some investiga- tions support the matching hypothe- sis, while others do not. This makes it difficult to take up a definite viewpoint in favor of one of these educational designs.	Results are coherent with hypothesis posited. Relationships between learning styles and teaching styles seem to occur implicitly.
Educational approach	 (1) Identify students' learning styles (2) modify teaching styles in accordance with different adaptation alternatives: 2.1 unify methods and techniques aligned to groups made up of homogenous styles. 2.2 diversity methods and techniques aligned to groups with heterogeneous styles. 	(1) Identify students' learning styles.(2) Train students in study skills and techniques so that they can adapt to the predominant teaching styles of their professors.

Up to now the studies we have reviewed have taken a nomothetic approach. They present generalizations about the style of the teaching population. In the words of Fenstermacher (1997) training future teachers in this way is the same as exhibiting and teaching a kind of style. This style is part of the content that must be transmitted to the student just as much as facts, theories, arguments, and ideas about the topic being taught.

In these investigations aspects of personality are detached so they can be measured and converted into data, doing without the person (Valsiner & Salvatore, 2012), that is, the whole person in his/her context. So style from an ideographic perspective is built personally, the teacher being able to cope on his/her own and to integrate aspects of his/her training, environment and individuality.

Building bases for an ideographic style: personal self-regulation in teacher training

The model-style articulation in teaching is a relationship of regulation but never of determination, offering points of identification and anchorage (Ventura, 2015). In this way, style transcends the concept of method that includes teaching process variables, such as personal characteristics, concerns, beliefs about learning and teaching, satisfactions and self-regulatory processes (De la Fuente, García-Berbén, & Zapata, 2013; Veiga-Simão, Flores, Barros, Fernandes, & Mesquita, 2015).

A clear exponent of this position is the DIDEPRO® Model (De la Fuente, 2007; De la Fuente & Justicia, 2007), whose name is the acronym of *Diseño, Desarrollo y Producto* (Design, Development, and Product), due to the fact that it considers that the auto-regulatory processes in teaching are strongly linked to the auto-regulatory processes in learning. The teacher is involved at three stages of this process: design (before), development (during), and the final product (after). At the design stage, the teacher schedules each point of the process, in terms of learning load, timing and meaning of each moment of the learning sequence, as well as explaining and sharing the design with the students so that they can understand it and make it their own. Development implies teaching activities such as explaining objectives and learning targets, preparatory activities before starting each task, formative and continuous feedback; explicit learning strategies and tools for carrying out the activities. Lastly, the final product involves the assessment of competences developed as well as the estimation of student satisfaction and his/her own satisfaction with the process accomplished (De la Fuente & Justicia, 2007).

New evidence about this proposal suggests that training, interacting with the level of teaching regulation, impacts on university students' perception of teaching in terms of regulation, of self-regulation in learning, and about their satisfaction (De la Fuente, García-Berbén, & Zapata, 2013). More specifically, high achievement and academic confidence may be the product of a kind of interaction called personal self-regulation (De la Fuente et al., 2014).

In view of what we have said above, a style with personal self-regulation represents a particular pattern in ways of conceiving and delivering teaching which is expressed in different dimensions of teaching actions, a pattern understood from the ideographic and dynamic point of view as a "singular organization of regular ways of playing a privileged role" (Cols,

2011). The idea of pattern emphases, on the one hand, the multidimensional nature of style. Style is, in the first instance, a way of doing; a way that the teacher puts into action to favor processes of knowledge-building, he/she combines several elements: a particular shaping of contents, a particular way of connecting with students, a methodological proposal. Style constitutes a way of entering into a relationship with teaching and carrying it through. In turn, style is not only a way of acting, but also of perceiving, conceiving, and valuing teaching. Traits that define acting express teaching as a way of being. In addition, the idea of pattern remits us to an issue of "combination", to the particular way in which the "work is composed" to produce a singular and unedited creation.

We acknowledge that in this regard, the pattern idea enables us to take on board another viewpoint, inasmuch as the singular and the unedited do not arise only because of the kind of attributes they are but because of a kind of particular connection there is among them, because of the way in which the latter are linked to the former. Pattern alludes to shape, to the whole. For this reason, even though mediation of the analysis of discursive methods and the activity of the subject is important, we do not come across style as the sum and combination of independent traits of different aspects or criteria, but as the particular combination and potential of each one of them. "The singular 'alchemy' that a professor's teaching style conjures up can be observed from a *holistic* viewpoint" (Cols, 2011, p.179).

In each stylistic pattern there are relations of continuity (between the teacher's particular interpretation of some issue and the courses of actions adopted), and relationships of a different nature, rather, of discontinuity (Ventura, 2015). Relationships of discontinuity can emerge from unresolved tensions attributable to difficulties in mobilizing resources, even though these might be available, within the context of action, or to the lack of resources necessary to accomplish teaching plans. Or they may be linked to difficulties in perceiving the problem and the need to legitimize a way of acting that will offer a certain degree of security.

However, more current standpoints about relations of discontinuity assert that these natural tensions are only to be expected in personal negotiations and repositionings, also called versions, linked to actions (represented and/or manifested) in specific educational contexts (Hermans, 2013). In this regard, personal style arises from a process involving biographical frameworks and marks of identity. Hermans (2013) suggests advancing in the articulation of a theory of action with a theory of identity. For him, the question of action is linked

to the problem of the identity of the actor, to the extent that the individual is transformed by his/her own action, and that the action sets in motion representations of identity. It is difficult to distinguish, therefore, between being and acting. The author has put forwards a series of considerations relevant to the need that approaching this issue should incorporate the consideration of different components of identity – representational, operational, affective and biographical - which would capture its "state" and its "process," at its individual and collective levels.

Conclusions

This article has briefly offered a panoramic vision of the different trends and the different ways of doing in teacher training with regard to stylistics. These perspectives have their origins in diverse concepts and search for their foundations in basically psychological viewpoints of the model of the mind.

Teaching models and theories about teaching and learning support the summary we have presented and described through three approaches: first, the empiricist-behaviorist view, including the presage-product theory; second, the rationalist-cognitivist stance, within which there are different approaches (the teacher's thought and adaptive teaching); and third, of a sociocontextual and situated character. It is possible to conclude that these three approaches are committed to a vision of teaching that is closely connected to a vision of learning. This is worth pointing out as it was not understood in these terms in the early stages of research supporting the presage-product and rationalist-cognitive approaches. Even so, they are all encompassed within a nomothetic focus with limitations in explaining personal styles as marks of the teacher's own identity. So there are proposals to delve into dynamic and ideographic aspects of stylistics in teacher training, paying more attention to the understanding and explanation of stylistic richness and plasticity through transitions, discontinuities, subtleties, loops, and different kinds of change.

From a personal perspective, style works as a tool for describing the patterns of action of an individual and his/her ways of coping with the "real," for throwing light upon the senses that the actor attributes to his/her experience and action, for establishing bonds between activity patterns and the individual's conceptions about action, and for searching for articulations among different dimensions of action (relationships among didactic interventions, pedagogic management and links between intention and fulfilment, and among decisions relating to dif-

ferent teaching components). Within that possibility of making a set of heterogeneous, even discordant, elements intelligible to an observer resides the potential of the notion of personal and self-regulated style.

In conclusion, this article defends two basic ideas about the ways of understanding the nature of teaching styles. On the one hand, styles are made up both of favorite ways of behaving and beliefs about learning and teaching (which make sense of these actions). On the other, styles are anchored to individual as well as to social and contextual patterns. These two notions, in turn, should be reflected in objects of study and in methodological procedures adopted in current research by means of complementary techniques, types of analysis and perspectives on the interpretation of results.

This stylistic approach offers resources for teacher training, some of which have already been incorporated into many of the training practices going on around us. All of them may be combined together and offer new ways of looking at and making sense of recreating and reinterpreting research contributions already received.

Referencias

- Aelterman, N., Vansteenkiste, M., Van den Berghe, L., De Meyer, J., y Haerens, L. (2014). Fostering a Need-Supportive Teaching Style: Intervention Effects on Physical Education Teachers' Beliefs and Teaching Behaviors. *Journal of Sport & Exercise Psychology*, *36*, 595-609. doi: 10.1123/jsep.2013-0229
- Álvarez, C., y Hevia, I. (2013). Posibilidades y límites de la relación teoría-práctica en la formación inicial del profesorado. *Cultura y Educación*, 25(3), 337-346. doi: 10.1174/113564013807749759
- Beltrán, J., y Pérez, L. (2011). Más de un siglo de Psicología Educativa. Valoración general y perspectivas de futuro. *Papeles del Psicólogo*, *32*(3), 204 231.
- Bennett, N. (1976). *Teaching styles and pupil progress*. Cambridge: Harvard University Press.
- Brophy, J., y Good, T. (1986). Teacher behavior and student achievement. In M. Wittrock (Ed.), *Handbook of research on teaching* (pp. 328–375). Nueva York: Macmillan.
- Chowdhury, R.K. (2015). Learning and teaching style assessment for improving project-based learning of engineering students: A case of United Arab Emirates University. *Australasian Journal of Engineering Education*, 20(1), 81-94. doi: 10.7158/D13-014.2015.20.1

- Clark, C., y Peterson, P. (1997). Procesos de pensamiento de los docentes. In M. Wittrock (Ed.), *La investigación de la enseñanza, III. Profesores y alumnos* (pp. 443 539). Barcelona: Paidos.
- Cols, E. (2011). Estilos de enseñanza. Sentidos personales y configuraciones de acción tras la semejanza de las palabras. Rosario: Homo Sapiens.
- Cools, E., Armstrong, S., y Verbrigghe, J. (2014). Methodological practices in cognitive style research: Insights and recommendations from the field of business and psychology. *European Journal of Work and Organizational Psychology*, 23(4), 627–641. doi: 10.1080/1359432X.2013.788245
- Corno, L., y Snow, R. (1986). Adapting teaching to individual differences among learners. In M. Wittrock (Ed.), *Handbook of research on teaching* (pp. 605 629). Nueva York: McMillan.
- De la Fuente, J. (2007). *Modelo de utilidad DIDEPRO*[®]. Almería: Education & Psychology I+D+i.
- De la Fuente, J., García-Berbén, A.B., y Zapata, L. (2013). How regulatory teaching impacts university students' perceptions of the teaching-learning process: The role of teacher training. *Infancia y Aprendizaje*, *36*(3), 375-385. doi: 10.1174/021037013807533016
- De la Fuente, J., y Justicia, F. (2007). The DEDEPRO Model for Regulating Teaching and Learning: recent advances. *Electronic Journal of Research in Educational Psychology*, 5 (3), 535-564.
- De la Fuente, J., Sander, P., Cardelle-Elawar, M., y Justicia, F. (2014). Personal self-regulation and regulatory teaching to predict Performance and Academic Confidence: new evidence for the DEDEPRO ModelTM. *Electronic Journal of Research in Educational Psychology, 12*(3), 591-620. doi: 10.14204/ejrep.34.14031
- Doyle, W., y Rutherford, B. (1984). Classroom research on matching learning and teaching styles. *Theory Into Practice*, 23, 20 25.

- Evans, C., y Waring, M. (2012). Application of styles in educational instruction and assessment. In L. Zhang, R. Sternberg y S. Rayner (Eds.), *The handbook of intellectual styles* (pp. 297 330). New York: Springer.
- Feixas, M., Fernández, A., Lagos, P., Quesada, C., y Sabaté, S. (2013). Factores condicionantes de la transferencia de la formación docente en la universidad: un estudio sobre la transferencia de las competencias docentes. *Infancia y Aprendizaje*, *36*(3), 401-416. doi: 10.1174/021037013807533034
- Fenstermacher, G. (1997). Tres aspectos de la filosofía de la investigación sobre la enseñanza. In M. Wittrock (Ed.), *La investigación de la enseñanza*, *I. Enfoques, teorías y métodos* (pp. 149–179). Barcelona: Paidos.
- Flanders, N. (1970). Análisis de la interacción didáctica. Madrid: Anaya.
- Goldberger, M., Ashworth, S., y Byra, M. (2012). Spectrum of Teaching Styles Retrospective 2012. *Quest*, 64(4), 268-282. doi: 10.1080/00336297.2012.706883
- Grasha, A. (2002). *Teaching with Style. A Practical Guide to Enhancing Learning by Under*standing Teaching and Learning Styles. San Bernadino, CA: Alliance Publishers.
- Hederich, C. (2013). Estilística educativa. Revista Colombiana de Educación, 64, 21–56.
- Hermans, H. J. M. (2013). The Dialogical Self in Education: Introduction. *Journal of Constructivist Psychology*, 26(2), 81–89. doi:10.1080/10720537.2013.759018
- Kikas, E., Gintautas Silinskas, G., Jõgi, A.L., y Soodla, P. (in press). Effects of teacher's individualized support on children's reading skills and interest in classrooms with different teaching styles. *Learning and Individual Differences*. doi: 10.1016/j.lindif.2016.05.015
- Medina, L. (2014). How to access the conceptions and theories that underlie teaching practices? A theoretical-methodological reflection based on dialogic discourse analysis. *Cultura y Educación*, 26(3), 603-616. doi:10.1080/11356405.2014.965448
- Mosston, M. (1990). Las tres erres para los profesores: Reflexionar, refinar, revitalizar. Apunts: Educació Física i Esports, 24, 39 – 44.
- Nurmi, J. E., Viljaranta, J., Tolvanen, A., y Aunola, K. (2012). Teachers adapt their instruction according to students' academic performance. *Educational Psychology*, *32*, 571–588. doi: 10.1080/01443410.2012.675645
- Pradas, R. (2010). El estudio del pensamiento del profesorado sobre la toma de decisiones interactivas: Análisis de un caso en Educación Física escolar. *Cultura y Educación*, 22(1), 21 36. doi: 10.1174/113564010790935187

- Prados, M., y Cubero, M. (2013). Reflexionando acerca de cómo estudiar el proceso de enseñanza-aprendizaje en el contexto natural del aula universitaria. *Cultura y Educación*, 25(3), 273–284. doi: 10.1174/113564013807749696
- Romero-Martín, R., Fraile-Aranda, A., López-Pastor, V.M., y Castejón-Oliva, F.J. (2014). The relationship between formative assessment systems, academic performance and teacher and student workloads in higher education. *Infancia y Aprendizaje*, *37*(2), 310-341. doi: 10.1080/02103702.2014.918818
- Saxe, G.B. (2015). Studying culture-cognition relations in collective practices of daily life: a research framework. *Infancia y Aprendizaje*, 38(3), 473-508. doi:10.1080/02103702.2015.1054669
- Shulman, L. (1997). Paradigmas y programas de investigación en el estudio de la enseñanza: Una perspectiva contemporánea. In M. Wittrock (Ed.), *La investigación de la enseñanza*, *I. Enfoques, teorías y métodos* (pp. 9 91). Barcelona: Paidos.
- Valsiner, J., y Salvatore, S. (2012). How idiographic science could create its terminology? In S. Salvatore, J. Valsiner, y A. Gennaro (Eds.), *Making sense of infinite uniqueness: The emerging system of idiographic science yearbook of idiographic science* (Vol. 4, pp. 3–20). Charlotte: Information Age Publishing.
- Veiga-Simão, A.M., Flores, M.A., Barros, A., Fernandes, S., y Mesquita, D. (2015). Perceptions of university teachers about teaching and the quality of pedagogy in higher education: a study in Portugal. *Infancia y Aprendizaje*, 38(1), 102-143. doi:10.1080/02103702.2014.996408
- Ventura, A.C. (2016). ¿Enseño como aprendí?: el rol del estilo de aprendizaje en la enseñanza del profesorado universitario. *Aula Abierta*, 44(2), 91 98. doi: 10.1016/j.aula.2016.05.001
- Ventura, A.C., y Moscoloni, N. (2015). Estilos de enseñanza y aprendizaje en las aulas universitarias: la dimensión cognitiva y social de la estilística. *Psicología, Conocimiento y Sociedad*, 5(1), 82 109.
- Villalta, M., y Martinic, S. (2013). Interacción didáctica y procesos cognitivos. Una aproximación desde la práctica y discurso del docente. *Universitas Psychologica*, 12(1), 221–233.
- Witkin, H., Moore, C., Goodenough, D., y Cox, P. (1977). Field–dependence and field–independence cognitive styles and their educational implications. *Review of Educational Research*, 47, 1 64.

Zhang, L., Sternberg, R., y Fan, J. (2013). Revisiting the concept of style match. *British Jour-nal of Educational Psychology*, 83, 225 – 237. doi: 10.1111/bjep.12011