The Role of the Teacher under the Digital Paradigm.  
A Study on Didactic Materials Intended for High School Teachers in Argentina

Carolina Tosi  
University of Buenos Aires – Conicet (Argentina)  
ctosi@arnet.com.ar

Abstract  
According to various research studies (Col, 2009; Kope & Kalantzis, 2009; Adell, 2010), new information and communication technologies (ICTs) are optimal didactic resources. However, their potentialities are mediated by teacher practices and representations constructed on pedagogic subjects, knowledge and learning. In effect, the role assumed by teachers, in relation to underlying imaginaries, will be essential to guarantee—or not—the integration of ICTs in the teaching process. From this starting point, this study analyses the social representations constructed around the role of secondary-school teachers, with the goal of investigating the tension that originates between traditional and new teaching practices—namely those emerging from a digital paradigm. The corpus consisted of two types of materials intended for secondary-school teachers: one printed and one digital, both recently published in Argentina and exposing different constructs. We both analyse the representation of the teacher in teacher’s books published as accompanying materials to course books produced by publishing companies, and examine the representation of teachers www.educ.ar, the educational website of the Argentine State offering free digital resources. Through our analysis, we show the tension between the construction of a passive teacher, centred in a corpus of closed information, and the representation of an autonomous teacher who must organize resources and generate new forms of teaching. As it becomes evident, we deal with dissimilar representations that evidence opposed notions of learning and knowledge. As these notions coexist, they undoubtedly generate conflicts in the teaching practices. Finally, we reflect on the challenges that the digital paradigm imposes and the need to implement actions that accompany teachers in the transformation of their role in a new educational landscape.

Introduction  
The incorporation of new of information and communication technologies (ICTs) in education has raised a series of transformations involving changes in teaching practices that require a redefinition of the role of the teacher in their tasks and responsibilities. From this perspective, the approach to the social representations built around the teacher is essential to understand the difficulties and challenges that such transformations require.  
Understood as forms of social thought, social representations serve as reference systems to interpret facts and determine the perception of objects and subjects (Jodelet, 1984). In this regard, we believe that the discourses that are set in relation to the figure of the teacher have an impact on their image as professionals and on the performance of their role.  
This paper analyses the social representations of secondary-school teachers in order to investigate the tension that arises between traditional and new teaching practices—namely those emerging from a digital paradigm. The corpus used consists of two types of materials for secondary-school teachers: one printed and one digital, recently published in Argentina. One of the sources of our corpus consists of teacher’s books of several disciplines (Language and Literature, History and Biology), produced by five publishing companies of great importance in Argentina (Estrada, Puerto de Palos, Kapelusz, Santillana, SM). The other source is the state website www.educ.ar, that provides free digital resources.  
First, we make a description of the teacher’s books and analyse the image of the secondary-school teacher outlined there; then we focus on the construction of the teacher image in the aforementioned website. Finally, we reflect on the challenge of teaching with ICT and the role that the teacher accomplishes in the process.
The image of the teacher in teacher’s books

Teacher’s guides—also called teacher’s books or resources for teachers, among other names— are accessory and complementary materials to course books, which are intended as reference and resource materials to assist the teacher.

Designed and produced for the teacher as the user of the course book, the teacher’s book is a free guide that is usually distributed in print, as a booklet separated or annexed to the course book, or in its digital version on the website of the publishing company, where teachers can download the PDF file as a resource. In any of these versions, the existence of a teacher’s book is usually a key reason for a teacher to choose a particular course book for their class. Therefore, for publishers, teacher’s books are a necessary and indispensable product that should accompany any course book.

While in Argentina, teacher’s books emerged in the 80s as an innovative product brought by foreign publishers who settled in the country its boom was during the 90s, with the enactment of the Federal Education Act (in 1993) and the writing of a new curricula (in 1995). Because these transformations imposed new teaching approaches, as well as categories such as “constructivism”, “conceptual, procedural and attitudinal contents”, and others, teacher’s books had the mission of assisting teachers with these new approaches to teaching. This is why, even today, even with the recent passage of the National Education Act (in 2006), they retain their relevance.

Teacher’s books have a first fixed section containing resources for planning or the box contents for each chapter. This section aims to assist teachers in lesson planning or designing the syllabus.

Some guides also provide a theoretical background, the explanation of the structure of the chapters, bibliographic sources, references to websites, tips for assignments (extra activities and tasks complementary to those given in the book) and assessment models. But also, for at least a decade, teacher’s books began to have a section that contains answers to the exercises in the course book. Actually, teacher’s books provide answer key to the activities, page by page and chapter by chapter. As shown in (1) the Biology 2 teacher’s book provides answers to the activities in Chapter 1 on the corresponding course book.

(1) Source: Balbiano et al. (2013), p.8
As it is evident, teacher's books build a recipient-teacher close to a layman, who has to be assisted in planning the classes and also to be provided with the theoretical contents. If course books can be considered “a powerful device for the intellectual, cultural and professional disqualification of the teaching subject” (my translation from the original in Spanish: “un potente dispositivo de desautorización intelectual, cultural y profesional del sujeto docente” - Martínez Bonafé, 2002: 60), teacher’s books maximize this effect. From this perspective, the editorial proposal under analysis leaves out the figure of the teacher, since it takes its place as the expert in the discipline. In this sense, the teacher’s book would constitute a symbolic replacement of the teacher: its pages are a source of theoretical knowledge –explicit in the answers provided– and of the know-how: it is responsible for planning and designing the activities. Hence, it is possible to say that teacher’s books undermine teachers’ autonomy and status as professionals, since it presents them practically as apprentices, who need to be provided with the “right” answers – as if there were any. Similarly, the practice is subjected to the resources provided by the book. Therefore, we can conclude that the discursive construction made in teacher's books is that of a passive teacher, focused on a closed corpus of information, and disqualified in their expertise.

**Digital resources and the representation of the teacher**

For over a decade, curricular discourses produced in Argentina have emphasized the need to develop ICT education proposals. However, since the creation of the governmental program Conectar Igualdad (‘Connecting Equality’ in English) by Decree 459 of April 2010, this aspect became more relevant and it was established as one of the priorities of the education system. It is worth mentioning that Programa Conectar Igualdad is a state policy of digital inclusion at a federal level. Its aim has been to distribute 3.5 million laptops to all students and teachers in secondary schools, special schools and state-run, teacher-training institutes (following a 1:1 model) between 2010 and 2013. The advent of netbooks into the classroom promoted the question of how to implement ICT and involved the review of methodologies and teaching practices. The new context requires that the potential of new technologies and the Internet are used in the classroom. These can be understood from different dimensions, such as “library, printing and communication channel” (my translation from the original in Spanish: “biblioteca, imprenta y canal de comunicación” - Adell, 2010). However, it is possible to propose a new type of learning: “oblique” learning (Cope and Kalantzis, 2009), which does not limit knowledge to formal educational institutions. In this sense, teachers are facing a great challenge because they have to try to “stop teaching the usual, as usual” (my translation from the original in Spanish: “dejar de enseñar lo de siempre como siempre” - Cope y Kalantzis, 2009).

Within this framework, the production of digital contents by the website www.educ.ar is highly significant. Created in 2003, it is one of the educational websites of the Ministry of Education of Argentina, offering online resources for the educational community, in order to incorporate ICT to teaching practices. As it is shown in (2), the materials for teachers are on the Resources tab. There, free resources are organized by levels of education, discipline and type (audio-visual, game, treasure hunt, didactic approach, and others.). The teacher can investigate; explore the different categories in the site and search by topic in the search bar, devising their own journey. Thus, teachers can self-manage their practice and design their own teaching plans incorporating ICT. Thus, the role of an autonomous teacher is outlined: one who can organize resources and generate new forms of teaching.
Undoubtedly, digital teaching materials establish new ways of teaching that disarticulate the conception of the use of a single course book in the classroom. These materials however, raise other problems and challenges, such as the actual use of ICT, continuous training of teachers, the breakup with stereotypes, fears of new technologies, etc.

In this context, teaching-training actions to accompany teachers in the process of thinking teaching proposals with ICT are essential. While training activities are still at an early stage, these have been of great importance. Among them are the teacher training workshops that are held throughout the country, through www.educ.ar, as well as postgraduate training workshops such as Postítulo de Especialización Docente de Nivel Superior en Educación y TIC (Post-Graduate Specialization Diploma in Higher Level Education Teaching and ICT). According to Cano and Magadan (2013), at first, teacher-training actions focused almost exclusively on “instructing” teachers in the use of tools. Currently a change is perceived: “most training proposals as well as the spaces for the creation of digital contents emphasize the need to think and design teaching proposals taking disciplinary knowledge as their starting point” (my translation from the original in Spanish: “la mayoría de las propuestas de formación así como los espacios de creación de contenidos digitales hacen hincapié en la necesidad de pensar y diseñar las propuestas pedagógicas tomando como punto de partida los saberes disciplinares” - Cano y Magadán, 2013).

In the new digital paradigm, publishers have been excluded so far. Actually, course book publishers produce books but not digital resources, except for some isolated guide or educational material on their websites. The causes are varied: big investments, staff training, low current demand, and others. Hence, we can say that for the present moment publishers have been left out of this paradigm. It is the State who is training teachers and providing digital resources for free, turning again into the main agent of educational actions.

**Conclusion**

As we have shown throughout this paper, the two types of materials analysed –teacher’s books and the educ.ar website– constitute two different models of teacher which contradict and confront each other. If we consider that social representations circulate in discourses and support teaching practices, their approach invites reflection on certain aspects of the pedagogical subject which have been avoided before and opens the debate about the how the role of the teacher is constructed in terms of teaching with ICT.

From this perspective, the social representations built around teachers constitute essential aspects to understand the difficulties and challenges they face and by which they are questioned in their daily practice.
Thus, it is essential to continue promoting actions to accompany teachers in transforming their role in the new educational setting.

References