Relations between teaching and learning.
Evidence from a meta-analysis of Language Didactics research.  

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I – Introduction

Recent developments in Education reveal a shift from teaching to learning, supported by international organizations (such as the European Commission) and experienced researchers (among others: Ferre Laevers, in Belgium; Peter Moss, Michael Young, David Hopkins and Denis Lawton, in the United Kingdom; Philippe Perrenoud, in Switzerland; Philippe Meirieu, in France). This shift is also a key issue in the Bologna Process.

This emerging paradigm, centred in the learners, implies new educational roles: more active and engaged pupils/students, capable of generating personal learning situations, assisted by teachers in these processes. They are expected not only to develop competences, but also to use former knowledge while creating new knowledge. In general, it is intended to learn how to deal with real, changing contexts.

Portugal is no exception in the European context. The ongoing educational reform is based on documents presenting propositions following these guidelines. And several measures are being taken in order to assure that this shift effectively takes place.

In this paper, we intend to present a study aimed to find out whether Portuguese research is following this trend or yet keeping in line with more traditional perspectives. It is confined to Language Education in Portugal and seeks for evidences for a shift from teaching to learning associated with a competence-oriented approach.

It is part of a broader study of Portuguese research: Project EMIP (Language Education: a meta-analytical study of Portuguese Research).


2 The authors acknowledge the support of the research assistant Joana Almeida.
The project presents the following aims: i) to contribute to the definition of the state of the art in the area of language didactics/language education research in the Portuguese context, ii) to trace the epistemological development of this recent scientific area and identify strengths, weaknesses, constraints and potentialities, iii) to look for signs of reciprocal influences between research and society, iv) to provide the academic and professional communities as well as policy-makers with a coherent body of knowledge, v) to enable diffusion of research processes and results and comparisons with the state of the art in other countries, vi) to provide an annotated bibliography and a list of specific terms of use to academics and professionals, vii) to contribute to a research policy in the area, viii) to involve young researchers in a research team (with experienced researchers), ix) to network two FCT research units where most of the research in the area has recently been produced.

II – Theoretical background

1. As already stated, recent developments in education reveal a shift from teaching to learning. This important shift is supported by international organizations such as the European Commission that emphasize the importance of developing competences adapted to modern society and its permanently changing status, oriented by a learning to ever learn concept and a more active role of learners.

In a well-known document on key competences in the knowledge based society, these are defined as follows: “Key competences represent a transferable, multifunctional package of knowledge, skills and attitudes that all individuals need for personal fulfilment and development, inclusion and employment. These should have been developed by the end of compulsory school or training, and should act as a foundation for further learning as part of Lifelong Learning.” (European Commission: s.d.: 2).

Such competences include (European Commission: s.d.: 5-13):

- some which can easily be related to traditional scientific areas (Communication in the mother tongue, Communication in foreign languages, Mathematical literacy and basic competences in science and technology, ICT skills);

- some more directly related to life in a modern society (Learning to learn and Entrepreneurship, in order to cope with a constantly changing context; Interpersonal, intercultural and social competences, Civic competences and Cultural awareness, leading to a more harmonic world).

These ideas are also supported by educational thinkers and experienced researchers.
Thinking of competences, one must recall the works of Philippe Perrenoud, who defined ten major competences teachers are supposed to master in order to prepare their pupils for a modern society (Perrenoud, 1999).

Some are specifically addressed to life in a modern society an enable teachers to immerse their pupils in a model of what this society should be: i) coping with heterogeneity (Concevoir et faire évoluer des dispositifs de différenciation), ii) team work (Travailler en équipe), iii) active citizenship (Participer à la gestion de l’école, Informer et impliquer les parents, Affronter les devoirs et les dilemmes éthiques de la profession and Gérer sa propre formation continue).

Others try to build the basis for a new conception of the pedagogical relationship: iv) featuring the teacher as an animator (Organiser et animer des situations d’apprentissage, Gérer la progression des apprentissages and Impliquer les élèves dans leurs apprentissages) and v) making him/her use new resources generating new ways of communicating, thus of teaching and learning (Se servir des technologies nouvelles).

But there are other researchers trying to change life at school.

Peter Moss (2008), for example, views school since the early years as a place where the essential issues are both political and ethical, much more than technical: in his words, education is more of a moral practice than a technical one, i.e. dealing with means and methods. Thus education at all levels is supposed to prepare individuals for life in a democratic society. Schools should be conceived as places favouring: i) integration, ii) socialization, encouraging solidarity and accepting collective choices, iii) diversity, stimulated by experimentation and the contact with multiple contexts, iv) and democratic political practice.

Furthermore, according to Moss (2008), schools should be models of a democratic society where all the actors (educators/teachers, pupils/students, parents) must: i) take part in decision making, ii) co-construct knowledge, values, identities, iii) evaluate, using participatory methods promoting collaborative deliberation based on evidences. Consequently, Moss (2008), reflecting about early childhood centres and their purpose in a modern society, agrees with Philippe Perrenoud (1999), trying to define the bases for modern school.

Ferre Laevers (2008) proposes an educational system caring for the well-being of pupils, which includes items such as: i) being open to the world and accessible, ii) showing self-confidence, iii) experiencing sensations and meanings, iv) enjoying the satisfaction of one’s exploratory drive and v) operating at the limits of one’s capacities.
This implies a new paradigm in education presenting certain distinctive features: i) promoting the development of competences, which are life-skills the subject must learn how to use, ii) dealing with complex situations, which allow the subjects to learn and use those skills, iii) replacing reproductive learning with problem solving and evaluation, iv) favouring an holistic approach, v) fostering self-organisation and entrepreneurship, vi) making the subjects live in a rich environment.

Such a framework is not compatible with a traditional teacher-pupil relationship. It requires pupils to be active and learn by reflective and critical involvement in all kinds of situations. The teachers’ role is directed to the provision and management of learning situations and to guidance through such rich learning experiences.

These educational principles were announced by “thinkers” in Education, during the whole 20th century. Just to mention a few: Carl Rogers, with the movement “Freedom to learn”, brought the person to the forefront (Rogers, 1961, 1969); Paulo Freire, the promoter of alphabetization in Brazil, a political-educational movement, developed ideas of personal and social development that inspired educational movements elsewhere (1987, 1992); Knowles also emphasized the role of the learner in his principles of adult education (1975); finally, in Language Education, Holec promoted learner autonomy in foreign language learning (Holec, 1981).

One can say these “thinkers” helped to create the “fertile soil” for the emergence of more organized movements supported by political decisions.

But one must also consider the influence of psycho-pedagogical paradigms, such as “constructivism”, built on Piaget’s description of human cognitive development (Piaget, 1977), and “socio-constructivism”, based on the ideas proposed by Vygotsky and developed by his followers (Vygotsky, 1962).

2. The Portuguese educational system is not far from these conceptions.

To begin with, Portugal has been part of the European Union since 1986 and must follow its political guidelines, namely those concerning education. Furthermore, Portuguese educational research keeps in touch with international trends.

As a result of these influences, the Portuguese educational system has changed a lot, namely since the 90s of the previous century.

These changes appear in general legislation and also in specific documents issued by the services of the Ministry of Education or specific task forces.

The most important document to be considered is the National Curriculum for Basic Education (Ministério da Educação, 2001).
This founding document introduces the concept of *competence* and deals explicitly with its use in the educational context. Furthermore, it presents ten essential competences pupils should develop during compulsory education. These essential competences concern important domains: i) knowledge and its use (including scientific and technological knowledge and also culture), ii) language (referring both to mother tongue and foreign languages), iii) methods and techniques centred in problem solving (looking for information and organizing it, selecting strategies adapted to a specific goal, taking decisions, being autonomous, being capable of involvement in team work) and iv) the ability to perceive life in an ecological way.

The relation with the ideas and trends previously discussed is easily perceived.

Nevertheless, some of these ideas are not easily implemented in the schools. A recent survey on this subject (Roldão, 2008) revealed that education is still too based on traditional conceptions of teaching, such as: i) strategic organization in very well-defined and academic tasks; ii) questioning of pupils by the teacher, in order to verify the ability to replicate the knowledge that has been handled out to them; iii) the tendency to rely almost exclusively on the schoolbook; iv) scarce use of inference and discovery; v) small attention paid to the need to organize the acquired knowledge.

This survey points out to some aspects that must be considered: i) the need to pay attention to the pupils’ culture and experience; ii) the importance of getting pupils used to evaluate and argue based on evidence; iii) the relevance of respecting ethical parameters while dealing with heterogeneous contexts at school.

The importance associated to these principles and their effects in the educational system in Portugal, as well as the fact that more than twenty years have passed since Language Didactics have become a privileged domain for research in Education, led to the need to start a meta-analysis process of the products of this research effort.

An exploratory study (*EADL – Ensino e Aprendizagem em Didáctica de Línguas*) revealed some important tendencies in the Portuguese research in this domain (Alarcão *et al.*, 2004) and confirmed the need for future analysis.

At the same time, one of the members of the team was conducting a meta-analytical study on the Portuguese research on verbal interaction in the language classroom (Cardoso, 2007), which became a PhD dissertation and made available a meta-model of analysis and exploration of scientific knowledge (Cardoso, Celorico e Alarcão, 2007:1).
These first essays were essential to the definition of objectives, methodology and instruments used in the current main project (EMIP), which serves as a framework for the present study.

III – Brief description of the main project

Project EMIP led to the analysis of publications and PhD and Master Thesis presented between 1996 and 2006, using a categorical instrument and a relational database called MAECC®.

MAECC® was built on the basis of a meta-model designed within a research project carried out in the Department of Didactics and Educative Technology of the University of Aveiro, in Portugal (Cardoso, 2007). It was aimed to analyse and explore scientific knowledge (Cardoso, Celorico, Alarcão, 2007: 1).

Its building implied an interactive and dynamic modus operandi involving: i) documental analysis, ii) content analysis and iii) permanent validation through the data (Cardoso, Celorico, Alarcão, 2007: 2).

It is a multidimensional and integrative matrix allowing: i) the characterization of the studies analysed by the name of the author(s), the title and the date of publication; ii) the identification of the theoretical rationale underlying these studies by the referenced authors and publications; iii) the description of methodological procedures based on data concerning the participants involved in the research process and the type of work it involves; iv) the identification of both the conclusions of the studies, dealing with their conceptual outcomes and practical results and their implications, and the suggestions resulting from them (Cardoso, Celorico, Alarcão, 2007: 3).

IV – Methodology and main results of the present study

1. This study aimed to analyse part of the total corpus: the titles and summaries of 147 PhD and Master dissertations presented between 1996 and 2006.

1.1. First of all, the research team defined 5 main categories, related with the theoretical background of the study concerning relations between teaching and learning. There were two oppositions (pupils/students vs teacher and learning vs teaching) and an isolated category (competences), which could be connected with all the other four.

Using these categories, the team analysed the titles of the 147 dissertations and selected the ones which could be relevant to answer the research question: is there evidence of a shift from teaching to learning?
As some titles suggested some possible relation, it was decided to further analyse the study objects of the dissertations. In the end, the team retained 75 dissertations, which became the corpus in analysis for this partial study.

1.2. In a second moment, the 75 dissertations were scrutinized in their results and implications, always in relation to the five main categories (students/pupils, teacher, learning, teaching and competences). More than one category could be found in the dissertations as the categories were not exclusive.

The dissertations that did not present results and/or implications were disregarded.

68 units of the five categories were found. Their distribution and respective percentages are presented in Table 1, which concerns the analysis based on the results of the dissertations.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Units</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pupils/Students</td>
<td>28</td>
<td>41,18%</td>
</tr>
<tr>
<td>Competences</td>
<td>25</td>
<td>36,76%</td>
</tr>
<tr>
<td>Learning</td>
<td>12</td>
<td>17,65%</td>
</tr>
<tr>
<td>Teacher</td>
<td>3</td>
<td>4,41%</td>
</tr>
<tr>
<td>Teaching</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>68</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Table 1 – Distribution of results according to the categories

After this analysis, one concluded that the results revealed an emphasis on pupils/students (41,18 % of the units) rather than on teacher (4,41% of the units) and on learning (17,65% of the units) rather than on teaching (0%). This result reveals a positive answer to the initial research question. Also relevant and in agreement with the theoretical background is the emphasis in competences (36,76% of the dissertations).

The analysis of the implications of the dissertations also revealed a stress on pupils/students, learning and competences, though the figures are much smaller, as most of the studies did not mention implications.

Their distribution and respective percentages are presented in Table 2.
Because of the few dissertations presenting implications, the team decided to concentrate only on results from that moment on.

It became evident that learning centred in competences received a lot of attention and that it could be interesting to analyse the type of competences, an issue that will be considered below.

1.3. The team also analysed the distribution of the categories according to different parameters, looking for significant results.

First of all, the team observed the distribution of the categories according to the different levels in the Portuguese educational system.

From the analysis of Table 3, one concluded that certain levels received more attention than others:
- there was a special stress on educational levels ranging from 12 to 15 years;
- some importance was given to the educational levels ranging between 16 and 18 years;
- the educational level attended by pupils between 6 and 10 years received little attention;
- pre-school education and higher education had very few references;
- the educational level attended by 10 to 12 year-old pupils was almost completely forgotten.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Units</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pupils/Students</td>
<td>4</td>
<td>28,57%</td>
</tr>
<tr>
<td>Competences</td>
<td>4</td>
<td>28,57%</td>
</tr>
<tr>
<td>Learning</td>
<td>4</td>
<td>28,57%</td>
</tr>
<tr>
<td>Teacher</td>
<td>1</td>
<td>7,14%</td>
</tr>
<tr>
<td>Teaching</td>
<td>1</td>
<td>7,14%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>14</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Table 2 – Distribution of implications according to the categories
<table>
<thead>
<tr>
<th>AGE</th>
<th>Pre-primary</th>
<th>Primary/Elementary School</th>
<th>Basic Education</th>
<th>Secondary/High school</th>
<th>Higher education</th>
<th>TOTAL</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(3-5)</td>
<td>(6-9)</td>
<td>(10-12)</td>
<td>(12-15)</td>
<td>(16-18)</td>
<td>(18-23)</td>
<td></td>
</tr>
<tr>
<td>Pupils/Students</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>11</td>
<td>0</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Competences</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>0</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Learning</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Teacher</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>28</td>
<td>2</td>
<td>19</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 3 – Distribution of categories according to levels in the Portuguese educational system
It seems possible to relate these tendencies with important events in Portuguese education in recent years:

- during a certain time, post-graduate studies in Education were attended by teachers of pupils ranging between 12 and 18 years;
- even when they worked in higher education institutions, they were mainly engaged in teacher training for these educational levels;
- since the end of the 90s, Portugal invested more in teacher training for the educational levels between 6 and 10 years; and recently (approximately since 2004), these professionals are also more systematically engaged in post-graduation courses, so they are also presenting dissertations;
- there has been a gap in teacher training concerning the educational levels attended by pupils between 10 and 12 years;
- and higher education has not been the object of regular concern regarding teacher training; the changes introduced by the implementation of the Bologna Treaty are making the difference.

1.4. The precedent phases of the analysis made it clear for the research team that one should go further on the research exploration.

So the interaction with the abstracts selected according to the five main categories revealed five other main themes: specific competences, reflective thinking, active pupils, curricular adaptation and evolution (Table 4).

<table>
<thead>
<tr>
<th>Categories</th>
<th>Students/Pupils</th>
<th>Competences</th>
<th>Learning</th>
<th>Teacher</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific competences</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>0</td>
<td>18</td>
<td>37.50%</td>
</tr>
<tr>
<td>Active pupils</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>9</td>
<td>18.75%</td>
</tr>
<tr>
<td>Reflective thinking</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>9</td>
<td>18.75%</td>
</tr>
<tr>
<td>Evolution</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>7</td>
<td>14.58%</td>
</tr>
<tr>
<td>Curricular adaptation</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>10.42%</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>13</td>
<td>11</td>
<td>2</td>
<td>48</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 4 – Main themes

As the theme specific competences was the one with more units, one explored the type of competences, as said before, and found learning competences, reading competences, lexical competences, metalinguistic competences and communicative competences (Table 5).
The analysis of Tables 4 and 5 reveals:

- a stress on the development of specific competences;
- equal importance given to active pupils/students and reflective thinking;
- some importance given to progress in learning;
- learning competences (associated with learning to learn) are valued above all the others;
- reading, lexical and metalinguistic competences are also considered.

Such results add new touches to the picture of the Portuguese education system. They show that, according to these dissertations, the development of competences in the pupils/students is being considered and that it goes along with the importance for pupils/students to take an active part in the educational process and to be reflective.

This picture is in accordance with the main ideas in the theoretical background of this study.

So it’s possible to confirm the importance given to a pillar of the system of competences defined by both international organizations and researchers in Education for the Society of Knowledge of the 21st century: learning to learn, in order to develop ways of dealing with a constantly changing context. At the same time, one observes that such a change in the educational context doesn’t prevent the validation of more traditional competences within the process of teaching and learning the mother tongue and foreign languages: metalinguistic competences and reading competences.

<table>
<thead>
<tr>
<th>Main themes</th>
<th>Categories</th>
<th>Types of competences</th>
<th>Pupils/Students</th>
<th>Learning</th>
<th>Competences</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning competences</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>33.33%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading competences</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>22.22%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metalinguistic competences</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>22.22%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lexical competences</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>16.67%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communicative competences</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>5.5%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5 – Types of competences
V – Discussion of results and conclusions

The different analyses carried within this study allow us to draw a kind of picture of the new trends in educational research in Portugal, concerning the teaching and learning of languages (both mother tongue and foreign languages).

First of all, it is important to mention that, among the five pre-defined categories, the most valued ones were pupils/students and competences.

This result can be related with some important dates in the Portuguese educational context. The first one is associated with the publication of the National Curriculum for Basic Education, in 2001.

The second one (2006) can be related to the first movements concerning the implementation of the guidelines of the Bologna Treaty and its effects on higher education, giving more emphasis to the development of competences.

Thus, it seems that, in recent years, research in the educational field in Portugal, as viewed through these dissertations, puts the stress on the role given to pupils in the educational process and, simultaneously, favours the development of competences by them.

Such competences include the learning competences (to relate with learning to learn) and also metalinguistic and reading competences, traditionally associated to the teaching and learning of languages.

This analysis also revealed some important consequences of the implementation of educational policies in Portugal. Some levels in the Portuguese educational system often forgotten (those attended by 6 to 9 year-old pupils and higher education) are now being given more attention. Nevertheless, others (namely pre-school and the level attended by 10 to 12 year-old pupils) are still undervalued.

These facts reflect the inflections in the development of the Portuguese educational system in the last two decades.

In short, one can conclude that this study shows that, in Portugal, there is a movement for replacing the traditional educative relationship, centred in the teacher and the transmission of knowledge, by a more modern one, featuring the pupil/student as the centre of the educational process and leading to the development of competences.

Such changes demand that the pupils/students:

- involve actively in the educational process and learn how to become reflective about the whole process;
- develop competences related with learning to learn, which will prepare them for an active and reflective participation in an ever-changing society, and also competences concerning a metalinguistic approach of languages.

Changes in learning suppose changes in teaching. The role given to the teacher is different, but he/she remains a key-element in education.

Although this study was affected by the fact that the figures involved in it are very small, we expect to provide some ideas for similar studies in the European framework.

VI – A final note

It is also relevant to leave a final note concerning two PhD dissertations focussing on the learner’s autonomy and so confirming the shift to learning. These studies were not considered in the “grey” literature, because they were published.

Vieira (1998) developed and implemented an autonomy-oriented program with 12 to 15 year-old pupils that resulted in the development of their metaprocessual competence.

Bizarro (2006) carried out an analysis of language syllabuses and of teachers’ representations. She concluded that i) syllabuses do not offer teachers ideas on how to develop learner’s autonomy, though they emphasize this approach and ii) teachers have little knowledge and know-how on this issue, though they show strong will to know more.

Bibliography:


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