Teachers’ Opinion about Teaching Competences and Development of Students’ Key Competences in Spain

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Abstract

As in other European countries, in Spain, the student curriculum of primary and secondary schools is organised by competences. The same applies with the curriculum for initial teacher education dealing with the same educational levels. However, in terms of competences, the analysis of classroom reality seems to prove the existence of obstacles in the development of teaching. For this reason, as trainers of future teachers, we wonder about the teaching competences that teachers consider most necessary to enable students to learn key skills. In order to address this issue, a study was conducted with a sample of 413 working teachers (286 of primary and 127 of secondary education). We used an ad hoc questionnaire which was subjected to an indepth statistical analysis. The results showed that primary and secondary school teachers considered the capability to promote students’ motivation, effort and responsibilities as the most important of the competences. As a consequence of this study, implications have been established for professional practice and suggestions have been made for initial teacher education.

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1. Introduction

In Spain, as in other European countries, there is great interest in teaching competences and initial teacher training.

The changes in education that arose from the implementation of the European Higher Education Area (EHEA), are forcing institutions in charge of initial teacher training to take on the responsibility of training primary and secondary education teachers so that they can access a coherent and quality education in key competences. In this sense, the teacher profile is shifting towards that of the professional to develop a set of cognitive, social, emotional

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and technological competences, allowing them to adapt to the new society in which increasingly varied and distinct activities are carried out (Hernández Abenz and Hernández Torres 2011).

Many authors have worked on defining and specifying teaching competences of teachers in training (Pollard & Tann, 1997; Perrenoud, 2006) and preparing training programmes with teaching competences as the main focus (Taconis et al., 2004; Hiebert et al., 2007). In turn, the Spanish education authorities have prescribed a set of teaching competences for future primary and secondary teachers. There are also studies that address the question: Which competences are considered essential to be a teacher? From the perspective of teacher trainers (Malm 2009), as well as that of future teachers (De-Juanas et al. 2009) and working teachers (Pesquero et al. 2008; OECD 2009).

In short, competences are the nucleus of school curriculums and of the initial teacher training curriculum. The aim is to align both as future teachers must be “competent in competences”. The integrated nature of key competences in the various areas of the school curriculum makes us wonder if teachers are aware of this integrating nature when assessing the teaching competences necessary to develop students’ key competences†.

In our interdisciplinary research group on teaching competences from the Complutense University of Madrid, we have considered analysing the relationship between teaching competences of future teachers of primary and secondary education with the key competences of students in their respective educational levels. This is due to the fact that among other reasons, the teachers who have participated in our studies consider that initial training did not prepare them adequately to perform their teaching competences, except in the aspects related to proficiency in the core academic contents of their field of knowledge (Martín del Pozo and De Juanas, 2009).

2. Method

The objective of this study was to describe and analyse which competences teachers of primary and secondary education consider most necessary to develop their students’ key competences. For this, we chose a non-experimental descriptive and transversal type design using survey methodology.

2.1. Participants

The study sample was composed of teachers whom during school year 2010-2011 were working in public schools in either primary or secondary education in the Community of Madrid (Spain). The total number of participants equalled 413 teachers, of which 286 were in primary education (71% women; 29% men) and 127 teaching in secondary education (57.8 % women; 42.2% men).

2.2. Instruments

In accordance with the study objectives, an ad hoc questionnaire was designed and literature was reviewed in order to establish the framework of contents to be measured by the instrument. Following this an initial pool of content was created which lead to the first version of the questionnaire. This was subject to the judgement of 12 experts, who assessed the relevance, coherence, clarity and simplicity in the drafting of the various teaching competence indicators. The results of the study, on the validity of the contents, by the experts was satisfactory this led to the creation of the final questionnaire being divided into two parts. The first half compiled the identification data to allow characterisation and description of participants. The second included twenty teaching competence indicators. In this section teachers had to respond, according to their assessment, on the need for these teaching

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competences to develop each one of the eight student key competences. In order to do so, a Likert-type gradual scale was used with scores ranging from 1 to 6 (from least to most necessary).

2.3. Data analysis

In accordance with the study objectives, descriptive statistical analyses were carried out allowing participants to be characterised and measures of central tendencies and dispersion to be obtained. To analyse the questionnaire’s internal consistency we calculated Cronbach’s Alpha reliability coefficient. The instrument’s reliability was considered high as it reached a value of 0.922 for secondary sample and of 0.918 for primary sample.

3. Results

Below, the study results are arranged according to the four competence areas. For each one of these areas we indication the values of the arithmetic mean for the indicators in each one of the key competences.

3.1. Teaching competences in the didactic-curricular area

The data of primary education shows that proficiency in curricular contents is considered most necessary in the three curricular areas with the greatest academic weight (language, 5.55; mathematics, 5.52; and sciences, 5.53), however, this was not so in the areas of culture and arts (5.14). This proficiency also seems necessary to help students with learning skills (5.26), but this was not as prominent in the area of enhancing social and civic competences of students (5.13), and their autonomy (5.18).

On the other hand, proficiency in curricular contents does not appear to be that necessary to develop digital competence (5.16). With regards to methodology, knowledge of educational procedures is considered particularly valuable in order to develop students key competences in all curricular areas (linguistic, 5.50; mathematical, 5.47; scientific, 5.42; cultural and artistic, 5.23) as well as digital competence (5.27). It is also considered necessary in order for students to learn how to learn (5.32), and just as with the proficiency in curricular contents, it is not considered as necessary to enhance the social and civic competences of students (5.12), and their autonomy (5.21).

The ability to detect prior knowledge of students seems to be considered necessary by teachers in order to acquire all key competences. However, they do acknowledge it is more necessary for students to develop linguistic competence, (5.38) but less so for cultural and artistic competences (5.14). The teaching competence to undertake activities that will enhance student autonomy or their different learning styles, has been assessed as especially necessary to achieve key competences unrelated to a specific area (learning to learn, 5.47; autonomy and initiative, 5.48; social and civic, 5.28).

Finally, the teaching competence related to evaluation is considered necessary to develop all key competences, given that they must all be evaluated, especially those related to key curricular areas.

However, for secondary school teachers the highest means corresponds to knowing curricular contents (4.99), and the corresponding didactic procedures (4.98), which show the importance given to the dimension contents. Moreover, activities for learning autonomy (4.97) and the detection of prior knowledge (4.86) show the value given to didactic issues which are related to methodological development by teachers of these educational levels. Among the lowest are: time and space flexibility; planning considering construction of disciplinary knowledge and design strategies in accordance with group heterogeneity.

3.2. Teaching competence in ethics education

The primary teachers considered teaching competences related to ethics education especially relevant for their career. Consequently, the most highly valued indicator (5.52) of the 20 proposed in the questionnaire was: how to promote motivation, effort and responsibility among students. For teachers, this is a necessary condition to ensure that education favours development of social and civic competence in students, as well as other cross curricular
competences: learning how to learn, autonomy and initiatives. However, they have not indicated if this is of equal importance for developing digital, scientific and mathematical competences, which shows that for teachers, scientific knowledge is not considered on a par with other values.

The secondary teachers consider that activities to promote respect, diversity and cooperation among students, are especially necessary in order to develop the social and civic key competence among students (5.18), as well as to foster autonomy and personal initiative (5.12) and learn to learn (4.91). In contrast, professional competence is considered less necessary to develop digital competence (4.69) and the specifically scientific (4.45) and mathematical (4.44) curricular areas. As for creating a classroom climate that favours coexistence, secondary teachers consider it is necessary for developing social and civic competence (5.40) among students, as well as autonomy and personal initiative (5.33) and learning to learn competence (5.3). Teachers consider that encouraging student commitment sustainably for the future is more necessary to develop student competences for social and civic (5.16), autonomy, personal initiative (4.83), knowledge and interaction with the physical world (4.80).

3.3. Teaching competence in the digital area

Primary teachers value the teaching competences related to the use of ICT as the most necessary to develop digital competence among students. Moreover, significant differences can be seen between their assessment of the need for this competence to develop digital skills and the rest of the key competences. Secondary teachers also value the teaching competences related to the use of ICT in classroom activities as the most necessary to develop digital competence among students (5.37) above promoting the use of ICT among students (5.27).

3.4. Teaching competence in the linguistic area

The primary teachers place special importance on indicators linked to developing student linguistic competence these are not considered as necessary to develop key competences linked to other curricular areas or to acquire digital competence. A surprising factor also was the little value given to proficiency by teachers of a foreign language (usually English) to develop best use of digital competence, when a very high percentage of digital information is in English. Equivalent results are observed among secondary teachers.

3.5. Teaching competence for collaboration

The teachers of primary education consider collaborating with other mates as an essential strategy to develop any key competence, although it does not necessarily have to be one of the highest values. However, collaboration with family is more highly valued (the second highest mean of all indicators, 5.38) interestingly this is not to develop key competences associated with curricular areas, except for language. On the other hand, secondary teachers consider that fostering family involvement in their children’s learning is important to develop the students’ competences of autonomy and initiative (5.05), social and civic (5.04) and learning to learn (4.92). There are no significant differences however in valuing the need for this professional competence to develop the various key competences.

4. Conclusions and discussion

This study is an initial approach to the relationship between teaching competences and key competences, bearing in mind the integral nature the latter has in the school curriculum. The results show that in the didactic-curricular area, teachers give a lot of importance to content and didactic aspects related to content development. It should be remembered that incorporation of the competence concept has had impacted this area significantly leading to changes in teaching practices (Tiana et al., 2011). In particular, the most cross-functional competences have been considered key for the most innovative proposals, contemplating school evaluation and organization tools and procedures more in line with learning focused on student needs (Halász
and Michel, 2001). We also believe that this approach could contribute to teachers’ professional and personal development.

Regarding the results on ethics education, we consider these competences to affect all areas even when this factor is *sine qua non* to achieve an effective implementation of didactic methodology; although, unlike primary teachers, secondary school participants do not give special importance to these competences.

As for the digital area, our data seem to indicate that some of the teachers support the view to not integrate the use of ICT in the teaching-learning process, but instead focus their use on the improvement or development of students’ digital competence. It suggests they see ICT as a separate competence that is not closely linked to the knowledge areas. In other words, we can deduce from the data that teachers see no relationship between using ICT and social and civic, linguistic, cultural and artistic, and mathematical competences. However, students born in the Web era tend to satisfy their information needs with the Internet in all its many forms: desktop computers, laptops, tablets, etc. (Rowlands et al., 2008).

Finally, in the area of collaboration we can highlight that secondary education teachers consider family involvement a professional competence linked to the key competences of ethics and not especially necessary to develop curricular content competences. Meanwhile, group work with other teachers is considered necessary in a relatively similar way to develop any area of knowledge and any key competence. Given that mean results are somewhat lower than other indicators, it may be inferred that teachers consider these teaching competences are not directly related to student key competences.

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