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INTEGRATING BASIC COMPETENCES INTO PHYSICAL EDUCATION (PE) IN PRIMARY EDUCATION

INCORPORACIÓN DE LAS COMPETENCIAS BÁSICAS A LA EDUCACIÓN FÍSICA EN EDUCACIÓN PRIMARIA

Méndez-Alonso, D.¹; Méndez-Giménez, A.² y Fernández-Río, J.³

¹ Doctor en Ciencias de la Actividad Física y del Deporte. Escuela de Formación del Profesorado Enrique de Ossó. Universidad de Oviedo (España). mendezdavid@uniovi.es

² Doctor en Ciencias de la Actividad Física y del Deporte. Facultad de Formación del Profesorado y Educación. Universidad de Oviedo (España). mendezantonio@uniovi.es

³ Doctor en Pedagogía. Facultad de Formación del Profesorado y Educación. Universidad de Oviedo (España). javier.rio@uniovi.es

Spanish-English translator: Cristina Rey cristina@nistalrey.es

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ABSTRACT

The purpose of this study was to assess Primary Education Physical Education (PE) teachers' perspectives of the process of incorporating the Basic Competences (BBCC) into the curriculum of the Principality of Asturias. A total of 151 PE teachers (46.6% of the whole population) answered an *ad hoc* questionnaire of 12 items using a 6-point Likert scale. The results showed a full incorporation of the CCBB into the subject's program. However, the degree of development in practice turned out to be much lower. Being female, young, and having a high-level and specific training emerged as differentiating factors. Cross-cutting skills were valued more than those related to the specific curricular areas. The depth of change undertaken by teachers and the required one are discussed. Finally, implications to address specific training are also introduced.

KEY WORDS Basic Competences, Physical Education, Primary Education, teaching program.

RESUMEN

El objeto de este estudio fue evaluar la percepción de los maestros de Educación Física (EF) del Principado de Asturias sobre el proceso de incorporación de las competencias básicas (CCBB) en el currículo del área. Un total de 151 maestros de EF (46,6% de la población) contestaron a un cuestionario *ad hoc* compuesto por 12 ítems mediante una escala Likert de 6 puntos. Los resultados mostraron una plena incorporación de las CCBB a las programaciones, sin embargo, el nivel de desarrollo en la práctica resulta ser más bajo. Ser mujer, joven y contar con una elevada formación específica emergieron como factores diferenciales del trabajo competencial. Las competencias de carácter transversal fueron valoradas de mayor relevancia que las relacionadas con determinadas áreas curriculares. Se discute la profundidad del cambio emprendido por los docentes y el supuestamente requerido. Finalmente, se abordan sus implicaciones de cara al tipo de formación específica.

PALABRAS CLAVE Competencias básicas, educación física, Educación Primaria, programación docente.

INTRODUCTION

One of the main curricular contributions made by the current Education Law (LOE, 2006) were those of Basic Competences (CCBB) understood as “those that any youngster must have developed once completed compulsory education in order to achieve self-fulfilment, become an active citizen, lead adult life in a satisfactory way and be able to undergo a permanent learning process throughout his/her lifetime” (RD 1513/2006, p. 1). Its inclusion to the official curriculum intends to focus on the learning processes consider essential, taking as a starting point a conciliatory approach and orientated towards the application of acquired knowledge.

Once that the competences which must be part of the official curriculum have been highlighted (DeSeCo, 2005; LOE, 2006) many essays have gone deeper , from a general scope, in how to include and develop the competences within the curriculum and how to plan for CCBB (Espinós, 2002; Sierra-Arizmendiarieta, Méndez-Giménez and Mañana, 2012; 2013; Moya, 2008; Serramona, 2000) As for PE in particular, this topic has risen much interest given birth to several essays focusing on four basic questions. Firstly, contribution of PE to the development of CCBB (Lleixá, 2007; Méndez-Giménez, López-Téllez and Sierra, 2009; Molina and Antolín, 2008; Navarro, 2009; Solé, 2003; Vaca, 2008; among other).

Secondly, the elaboration of programs with competences as a core (Belenguer, Ibor, Julián and López, 2009; Blázquez and Sebastiani, 2010; Contreras and Cuevas, 2011; Ibor, López, Julián, and Belenguer, 2010; Lleixá, 2007; Navarro, 2009; Solé, 2003; Vaca, 2008). Thirdly, assessment as an element in the teaching process (Pérez-Pueyo, 2012; Polo, 2012; Tortosa, 2011). Finally, the development of the CCBB from different methodological approaches (Calderón, Martínez and Méndez-Giménez, 2013).

However, the research made on the implementation process of the competencial framework in the curriculum is limited, Gordon et al. (2009) and Méndez-Giménez, Sierra-Arizmendiarieta and Mañana-Rodríguez (2013) highlighted the need to research the real implementation process of the CCBB and to analyze the impact that this framework is having in students’ learning , in the dynamics of the educative centres as well as for those in charge of leading this implementation: teachers. In particular, up to present time, no essay has been carried out which studies how this introduction of the CCBB is being done within the different elements of the curriculum of the PE in Primary Education. This lack of information encouraged this research, which from the first moment, was interested in the possible variables related to teachers which may influence on this process of introduction.

The introduction of the CCBB in the curriculum, as of any innovative educative element (Fullam, 2002), involves such a complex process as it means both a personal commitment and active participation from the members of the educative community. It is required, as well, innovative formative processes

which, quoting Hernández (2007) will be useful as long as they are connected to projects of improvement and they involve all members of the teaching board. Besides, the integration of the CCBB in the teaching planning must also involve a methodological consubstantial change so as to be a real one (De Miguel, 2006; Fernández, 2006; Sánchez, 2007; Sierra-Arizmendiarieta et al., 2013). In this change, institutions and educative centres develop a key role to the specific training of their teachers.

Certainly, one of the essential elements of the introduction of the innovative educative approaches is teachers' training. Díaz-Barriga (2010) believes that the tasks of putting into practice educative changes made by a legislator, is left on to many occasions, in the hands of teachers with a lack of a proper training which makes the task an impossible one. In several studies, they are the teachers themselves who have stated that the specific training for the development of the CCBB is not being done in the most suitable way or they point out a poor level of training (Ramírez, 2011; Zapatero, González y Campos, 2012). These difficulties could be the source of a certain level of indifference towards the goodness of the CCBB as well as to the uncertainty about how to include them in their teaching programs effectively.

The process of generic training of teachers as for the CCBB started in Teaching Colleges and Schools must be combined with programs of permanent training which minimizes the imbalance between theory and reality in classrooms. How this process of competencial training for teachers is done, the kind of program followed could condition teachers' perception towards the CCBB. Within the framework of permanent training, several processes of specific training have been promoted, both personal (Salinas, Miranda and Viciano, 2006), as for groups and cooperatives (Calderón and Martínez, 2014; Fullan, 2002) in teaching scenarios that encourage a real reflection of everyday practices by teachers (Imbernón, 2005). It is essential that it will be teachers themselves who share and assume the aims of the formative processes collectively. (Monereo, 2010).

On the other hand, Hargreaves (2003) considers that any change made within educative contexts results in a certain resistance from the involved agents. Teaching genre has been exposed as a determining factor in changes within the educative framework, so that women usually show a higher curiosity for their career development and to bind theory to practice, and they tend to worry more about learning throughout their lives (Romero, Vegas and Zimarrón, 2011). At the same time, women tend to be more critical and have a more enterprising spirit than men towards new approaches than men (Corominas, Tesouro, Capell, Teisido and Cortada, 2006). However, teacher's age and experience may be other factors that influence in the process of the implementation of the CCBB in the classrooms. Younger teachers and those who are closer to starting their career usually show a higher interest in learning, they look for new experiences and they are more critical (López, 1999), whereas older teachers tend to show a lack of confidence together with a bigger uncertainty to new performances (Darby, 2008). Therefore, sex and age will also be a variable in the present essay.

Objectives and hypothesis of this research

The main goal of this research is to determine the perception of PE teachers in The Principado de Asturias of the effective implementation process of the CCBB. Besides, it is intended to compare these teachers' ideas about the mention process of competencial implementation according to the following variables of segmentation : sex (female versus male), initial academic training (higher education, degree, Ph), specific training connected to CCBB (low, moderate or high), group work done in the centres (low, moderate or high) and relevance given to each basic competence.

Taking into account literature and the exposed antecedents, the following hypothesis were formulated:

H1.Changes declared by teachers in the real practice will be fewer than those mentioned in a theoretical way.

H2. Women will value both the process of the inclusion of the CCBB as the changes which came as a consequence much higher than men

H3.Younger teachers will be more sensitive to the process of integration of the CCBB

H4. Training and professional qualification will have an influence in the perception of the teachers about the incorporation of the CCBB in the curriculum.

H5. The better teachers' training is of CCBB, the higher their perception about its implementation.

H6.Teachers working in centres where group experiences about the integration of the CCBB have taken place, will be much receptive than the rest to the implementation process.

H7. Generally speaking, teachers will give more importance to the competences of cross-curricular character than to those with a more direct connexion to some of the curricular areas/fields.

Material and Methods

Sample

324 subjects were studied in our sample , according to the data from the teachers board of PE for the academic course 2011/12 provided by the Consejería de Educación and Universidades of Principado de Asturias. The final sample was of 151 participants (46,60%), as those teacher with a double role (tutors and specialist) were dismissed. The sample showed the following

socio-demographic features: 116 women (76,8%) and 35 men (23,2%); with a M of age of 40,87 years and a $DT = 7,33$.

Their working experience in the educative centres was of 11,42 years ($DT = 7,28$). Their level of academic training was classified into three groups: those who have a college degree in PE ($N = 62$; 41,05%), those having more than one speciality within Teaching degree and those having a degree in higher studies of Science of Physical activity and Sport, together with the mentioned teaching degree with speciality in PE ($N = 50$; 33,11%).

Tools

Due to the inexistence of proper tools for the valuation of the subject of the research, it was done a questionnaire ad hoc. The first version was developed by one of the researchers after an exhaustive revision of the literature and taking into account the antecedents described in the introduction. This version was reviewed and modified by other researchers of the project. A second version of the questionnaire was tried in a tiny sample of PE teachers, who examine the questions valuing their understanding and efficiency. Their comments were used to create a new version of the assessing tool that was named "questionnaire of the perception of the teaching practice based in the Basic Competences". In a first part, the questionnaire consists of a series of questions that deal with socio-demographic and professional aspects: sex, age, working experience in the same centre, general initial training, specific training referring to the CCBB (high, moderate, low). In a second moment, 12 items of personal valuation of the teaching performance were included in the competencial work in a group done in the educative centres (for example: " do you consider teaching based on CCBB important?", " have CCBB meant any important change in your teaching day?"). These items are assed according to a scale of 6 points using the following frequency quantifiers 1 = *hardly ever*, 2 = *occasionally*, 3 = *usualy*, 4 = *often*, 5 = *very often* y 6 = *always* (Cañadas and Sánchez, 1998), as to quantify the agreement and disagreement with each of the items of this variable. Finally, it was considered an item that intends to value the importance given by teachers to each of the CCBB. Participants should order from first to eighth each of the competences according to the relevance given in the curriculum.

Procedure

A total of 324 questionnaires were sent to every state centres of the region, taking into account the number of Primary teachers registered in the course 2011/12. In order to do so data were provided by the Consejería de Educación del Principado de Asturias. The envelope was sent to each centre, containing an introductory letter together with the basic objectives of the research and the questionnaire as well as the instructions to be filled in. Once they were filled in, participants returned them to the main researcher mainly by post to do the data dump, analysis and interpretation.

Data analysis

Statistical analysis of the data was done with the Statistical package IBM SPSS, v19. The questionnaire reliability measured by Alfa de Cronbach was of 9.2 which meant a high internal consistency. A test of Kolmogorov-Smirnov was requested to value the normality of all the variables, getting values of *Sig.* < .05 in almost all of them. This data points out that the criteria of normality was not fulfilled in its distribution. Therefore, in the following analysis no parametric test were undertaken, mainly, Kruskal Wallis test for K to samples of independent measures and the test U by Mann-Whitney for the contrast of pairs of measures, taking each of the items of the questionnaire as dependant variables and considering variables of segmentation as factors.

Specifically, the following comparisons were requested for each of the variables of the segmentation: sex: male versus female, fragmented age 25-35, 36-46 and 47-57 (the values 25 and 57 are the minimum and maximum of the sample), initial training: PE degree, several degrees, PE degree + High education degree, specific training in CCBB (low, moderate, high) and coordinate work in the centres to develop the CCBB (low, moderate, high).

RESULTS

In chart 1 statistical descriptive data from the total sample based on genre. The highest values were got in item 3. Almost all PE teachers state to have incorporated the CCBB in their teaching programs. After that, teachers valued the potential work based on the competences highly to improved the academic results (item6), as the relevance of this framework (item 2). However, competencial effective work in the classroom reflected quite lower levels than those stated on the programs (item 4). As for the lowest values, teachers declared a perception smaller than the average as for their perception to the change of area when integrating the competencial framework (item 9). Besides, group work in the centres to develop projects coordinated among teachers for the development of the CCBB was valued as occasional (item 8). Finally, the poorest valuation refers to the perception of work to all CCBB equally.

Table I. statistical descriptive data from the total sample based on genre

	Total		Males		Females	
	M	DT	M	DT	M	DT
1. have you received specific training about CCBB work?	4,55	0,99	4,31	1,10	4,62	0,95
2. Do you consider teaching base don CCBB important?	4,94	0,87	4,61	0,99	5,03*	0,82
3. have you incorporated CCBB to your teaching program?	5,35	0,70	5,39	0,72	5,36	0,70
4. Do you do activities based on CCBB?	4,87	1,00	4,31	1,05	5,04**	0,93
5. Have these changed your teaching development?	3,61	1,10	3,08	0,95	3,77**	1,10
6. Do they mean improvement in the academia results?	5,01	0,90	4,60	0,97	5,13**	0,84
7. Has it meant any changed in your methodological work?	4,60	1,13	4,08	1,19	4,75**	1,06
8. Have you done CCBB group work in your centre?	2,68	0,88	2,32	0,84	3,05*	0,86
9. Have you got a perception of change towards the work in CCBB?	2,85	0,83	2,37	0,73	3,00**	0,81
10. Have the CCBB any important role at programming?	4,37	1,17	3,88	1,32	4,52**	1,08
11. Do you consider you are working on all of them equally?	1,97	0,25	1,91	0,28	1,99	0,24
12. Have you introduced changes in your teaching programs for the 8 CCBB?	4,41	0,96	3,94	1,13	4,56**	0,86

Note: level of meaning of differences: (* $p < .05$; ** $p < .001$)

Chart II deals with the results of the statistical of contrast in comparison to genre of the items of the questionnaire. Data show significant differences in the 9 and 12 items of the survey, which as can be seen in chart I, favours women. It is observed a better willingness by women towards the process of integration of competences than by men

TABLE II. Statistical of contrast in comparison to genre

	item 1	item 2	item 3	item 4	item 5	item 6	item 7	item 8	item 9	item 10	item 11	item 12
U de Mann-Whitney	12305	14524	10309	10345	11784	13567	11564	12456	11498	11123	18451	1359
Z	-2,13	-3,42	-3,32	-4,81	-4,51	-3,64	-4,43	-3,37	-4,19	-4,24	-,301	-4,35
Sig. Asin. (bilateral)	0,00	0,04	0,05	0,00	0,00	0,00	0,00	0,04	0,00	0,00	0,69	0,00

Chart III shows results of the statistical of contrast in comparison to fragmented age of the items of the questionnaire. It can be seen that teachers' age is a determining factor in the competencial work. Younger teachers (25-35 years) seem to be more sensible to the work in the CCBB and show meaningfully higher to those older teachers (47-57) in almost all the items of the survey.

Table III. statistical of contrast in comparison to fragmented age .

item	25-35 years (N=34)		36-46 years (N=79)		47-55 years (N=38)	
	M	DT	M	DT	M	DT
1.	5,03 ^a	0,75	4,77 ^a	0,87	3,68 ^b	0,90
2.	5,24 ^a	0,69	5,01 ^a	0,79	4,55 ^b	1,05
3.	5,41 ^a	0,82	5,43 ^a	0,63	5,16 ^a	0,71
4.	5,09 ^a	0,75	5,05 ^a	0,90	4,32 ^b	1,21
5.	3,82 ^a	0,75	3,77 ^a	1,08	3,11 ^b	1,26
6.	5,21 ^a	0,77	5,13 ^a	0,83	4,61 ^b	1,02
7.	4,85 ^a	0,89	4,75 ^a	1,08	4,08 ^b	1,28
8.	3,21 ^a	0,84	3,19 ^a	0,86	2,55 ^b	0,79
9.	2,97 ^a	0,93	2,94 ^a	0,75	2,58 ^b	0,85
10.	4,53 ^a	0,86	4,56 ^a	1,10	3,87 ^b	1,39
11.	1,91 ^a	0,28	2,01 ^b	0,25	1,95 ^{ab}	0,22
12.	4,50 ^a	0,66	4,56 ^a	0,90	4,05 ^b	1,22

Note: different super- indexes among groups mean meaningful differences to level .05

In the same way, for the contrast of grading, depending on the bands of fragmented ages it was used, firstly, the test of Kruskal Wallis for 3 samples of independent measures (25-35, 36-56 and 47-55 years) followed by a U test by Mann-Whitney for the contrast of pair measures. Chart IV shows the statistical of contrast for each of the items of the questionnaire. In the chart III super-indexes are used to show meaningful differences between groups in the mentioned test. In a consistent way, in 10 out of 12 items a tendency to grade lower the integration of competences is observed, among elder teachers.

TABLE IV. Statistical of contrast depending on fragmented age.

	item 1	item 2	item 3	item 4	item 5	item 6	item 7	item 8	item 9	item 10	item 11	item 12
χ^2	23,29	18,49	24,26	17,94	13,34	15,80	12,22	13,61	3,714	13,49	1,910	10,49
<i>gl</i>	2	2	2	2	2	2	2	2	2	2	2	2
Sig, Asin	0,04	0,01	0,00	0,04	0,00	0,00	0,04	0,02	0,04	0,00	0,38	0,03

Chart V sums up the descriptive statistical connected with initial academic training of PE teachers (PE degree, several degrees, and a degree in PE+ higher education in PE). When applying Kruskal Wallis' test only a few meaningful differences were found in two items of the questionnaire ($p < .05$). Teachers who own a higher education degree graded lower than those with only a degree in number 3 and 10 items. Chart V also shows the descriptive statistical linked to the specific training related to competences. Once applied the contrast test (Chart VI), results show higher grading in almost every item as the level of specific training received increases.

Table V. Descriptive statistical connected with initial academic training received and level perceived of specific training about CCBB

item	PE degree (N=62)		Two degrees (N=38)		Degree+ Higher education (N=50)		low (N=3)		Moderate (N=67)		high (N=81)	
	M	DT	M	DT	M	DT	M	DT	M	DT	M	DT
1.	4,63 ^a	,94	4,47 ^a	,80	4,56 ^a	1,18	2,00 ^c	0,12	3,72 ^b	0,45	5,35 ^a	0,47
2.	5,08 ^a	,68	4,95 ^a	,77	4,80 ^a	1,12	2,67 ^c	0,57	4,42 ^b	0,70	5,47 ^a	0,57
3.	5,45 ^a	,56	5,55 ^a	,55	5,10 ^b	,89	4,67 ^c	0,57	5,04 ^b	0,76	5,64 ^a	0,50
4.	5,03 ^a	,83	4,87 ^a	,84	4,72 ^a	1,26	2,00 ^c	0,02	4,31 ^b	0,87	5,44 ^a	0,61
5.	3,63 ^a	1,06	3,58 ^a	,95	3,64 ^a	1,29	1,67 ^c	0,54	3,19 ^b	1,03	4,04 ^a	0,96
6.	5,16 ^a	,79	5,00 ^a	,80	4,86 ^a	1,07	2,30 ^c	0,14	4,60 ^b	0,88	5,43 ^a	0,63
7.	4,76 ^a	,97	4,68 ^a	,99	4,38 ^a	1,37	3,12 ^c	0,03	4,06 ^b	1,07	5,15 ^a	0,80
8.	3,08 ^a	,89	3,00 ^a	,77	3,02 ^a	,96	2,00 ^b	0,58	2,66 ^b	0,84	3,38 ^a	0,76
9.	2,89 ^a	,81	2,79 ^a	,78	2,88 ^a	,92	2,51 ^b	0,09	2,66 ^b	0,78	3,05 ^a	0,83
10.	4,68 ^a	,99	4,42 ^a	,92	4,00 ^b	1,43	1,33 ^c	0,89	3,93 ^b	1,14	4,86 ^a	0,84
11.	2,00 ^a	,31	1,95 ^a	,22	1,96 ^a	,20	2,25 ^a	0,27	1,96 ^a	0,20	1,99 ^a	0,29
12.	4,53 ^a	,74	4,42 ^a	,95	4,30 ^a	1,20	3,16 ^c	0,45	4,03 ^b	0,95	4,83 ^a	0,70

Note: different super-indexes between groups indicate meaningful differences level I .05

Table VI. Statistical of contrast depending on specific training of CCBB
Estadísticos de contraste en función de la formación específica de CCBB

	item 1	item 2	item 3	item 4	item 5	item 6	item 7	item 8	item 9	item 10	item 11	item 12
χ^2	124,1	67,52	29,30	61,30	31,93	40,74	44,22	30,11	11,74	34,36	,390	36,18
gl	2	2	2	2	2	2	2	2	2	2	2	2
Sig. Asin	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,82	0,00

Chart VII shows the descriptive statistical related to the variable of segmentation “coordinate work in the centres to develop the CCBB”. When asking for the contrast tests (Chart VII) it is noticed that those teachers who work in a centre where a moderate or high level of work perceived as shared to develop programs of competences, show results meaningful higher ($p < .05$) than those who work in a centre where the work has been low.

Table VII. Descriptive statistical depending on the valuation of the competencial work by groups within educative centres.

item	low (N=35)		Moderate (N=111)		high (N=21)	
	M	DT	M	DT	M	DT
1.	3,74 ^b	0,95	4,79 ^a	0,83	5,00 ^a	0,14
2.	4,23 ^b	0,94	5,16 ^a	0,74	5,20 ^a	0,44
3.	4,97 ^b	0,82	5,47 ^a	0,61	5,60 ^a	0,89
4.	3,97 ^b	1,12	5,14 ^a	0,80	5,40 ^a	0,54
5.	2,63 ^c	0,77	3,89 ^b	1,01	4,40 ^a	1,14
6.	4,23 ^b	0,84	5,24 ^a	0,77	5,40 ^a	0,89
7.	3,54 ^b	1,12	4,91 ^a	0,92	5,20 ^a	1,09
8.	1,80 ^c	0,40	3,32 ^b	0,47	5,20 ^a	0,44
9.	2,06 ^b	0,63	3,06 ^a	0,71	3,80 ^a	0,83
10.	3,37 ^b	1,23	4,67 ^a	0,97	5,00 ^a	0,70
11.	2,03 ^a	0,38	1,95 ^a	0,20	2,00 ^a	0,02
12.	3,60 ^b	1,11	4,67 ^a	0,77	4,60 ^a	0,54

Note: different super-indexes between groups indicate meaningful differences level I .05

Table VIII. Statistical of contrast depending on the valuation of the competencial work in groups within educative centres.

	item 1	item 2	item 3	item 4	item 5	item 6	item 7	item 8	item 9	item 10	item 11	item 12
χ^2	29,28	25,79	12,36	29,79	40,58	33,20	35,05	103,26	46,57	28,33	1,27	26,71
gl	2	2	2	2	2	2	2	2	2	2	2	2
Sig. Asin	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,52	0,00

Finally, chart IX shows the descriptive statistical of the items that value the importance that PE teachers give to each of the CCBB. It is seen higher grading to cross-curricular competences (such as personal, social and citizen´s initiative and autonomy) than those competences more related to concrete areas of the curriculum (Maths, Linguistic communication). This tendency is independent from the segmentation variables: sex, age, education, specific training and coordinated work in groups.

Table IX. Descriptive statistical data of the importance given to the CCBB.

	M	DT
1. Linguistic Communication Competence	3,84	2,54
2. Mathematical Competence	2,74	1,66
3. knowledge and interaction physical world competence	3,74	2,19
4. Managament of informnation and digital competence	4,64	1,86
5. social and citizen competence	6,04	1,82
6. Cultural and art competence	3,92	2,17
7. Learning and teaching competence	4,64	1,77
8. personal initiative and autonomy competence	6,38	1,70

DISCUSSION

The results obtained allow us to confirm every hypothesis posed. As for the first hypothesis, data show how most PE teachers of the Principado de Asturias have incorporated the CCBB in their teaching programs as it is prescriptive in the Law 1513/2006 of Primary Education and Law 56/2007 that regulates the curriculum of Primary Education in this region. However, it is a certain balance in teachers' answers as they have been put it into practice. This high results decrease slightly when they are interviewed about their real development in their teaching practice based on competences. A first slope is observed when they are asked if activities within the CCBB are done. A second incline refers to the more modest number connected with the possible changes of methodology, with teaching work or programs, that may have involved the incorporation of this competencial framework. Although CCBB are mentioned specifically in the teaching programs, teachers declare to modify them in a certain way which may be required after the competences incorporation. It is surprising that teachers' perception of the possible changes when integrating the CCBB in their daily work is so light.

This idea of the little need of change by teachers contrast to Sierra-Arizmendiarieta et al's thought (2013) about the demands of the framework of competences. According to authors the incorporation of the CCBB in the curriculum involves that they become the core that gives sense and articulates the rest of curricular elements. In practice, this will lead to conceive programs from a new approach and not to simply add a simply new section. In this way, the different aspects o skills to be developed for each of the competences must be linked, in every moment, to objectives, contents and activities, and assessment, by a more inter- disciplinary and global methodology. All these curricular methods, therefore, should undergo a modification not only in the formal organizational level but also in a structural one, as the approach of the teaching- learning process itself is modified.

It is meaningful the low level given by teachers to group works done about the CCBB in educative centres. Specific literature (Rodríguez, 2009; Zabala and Arnau, 2007; Calderón and Martínez, 2014) highlights the need of doing group teaching work, cooperative and inter-disciplinary so as to approach CCBB. However, in practice, the work carried on follows a dynamics (Pérez-Pueyo, 2012). The starting point is the curricular areas, in this case PE, towards CCBB (Escamilla 2008), and not a global approach and from a group of teachers of a same level, cycle or stage, which in a global and multi- disciplinary manner, deals with competences and clarifies them in the curricular areas. In general, PF teacher work the CCBB in an isolated way, without connecting their field with the rest, far away from their globalizing character that this framework should have (Zabala y Arnau, 2007). Only this work, from every sphere of the educative community, will allow to transform educative institutions taking as a starting point competencial work (Rodríguez, 2009).

As for the second hypothesis, women value higher than men both the process of incorporation of the CCBB as the changes made created by those. These

results are consistent with those stated by et al. (2011) and Corominas et al. (2006) in connection to women's tendency to be more critical and show a more enterprising spirit to new approaches. Resistance to the implementation of innovations by elder teacher was also confirmed by this research. These phenomena may be due to the situation of vulnerability, together with a lack of security, that the development of new teaching competences involves (Lansky, 2005) or to the loss of trust expressed by Darby (2008) as well as more uncertainty to new performances.

As for the fourth hypothesis, no meaningful differences in most of the items in the questionnaire among teachers with more or fewer degrees were found. However, the fifth hypothesis of the research related to specific training (competencial) was supported. As in contrast to the obtained results by Ramírez (2011), where specific training given in CCBB was considered as poor, Asturian PE teachers from this research declared medium levels of specific training. Besides, teachers with a moderate and high training grade higher every variable of implementation of the CCBB as oppose to those with a low training. In this way, specific training is proved to be an essential element in the perception and positive attitudes of teachers towards competencial work (Prat y Soler, 2003; Pérez-Pueyo, 2005). Again, training, both initial and permanent, proves to be a key factor to increase the quality of the educative system (Villamando, 2010).

Together with permanent training, teachers who work in centers where there are community projects of implementation of the CCBB were more receptive towards this process. This may give us an idea of the character that the programs of specific training of competences must have, with group implementations, cooperative work among teachers, by which it is enable and ease the awareness of the educative value of this framework. Finally, as for the valuation of the importance given by PE teacher to the different CCBB, results showed differences. Competences with a more cross-curricular character (social and citizen, learning to learn, cultural and artistic) were graded as more important than those directly associated with curricular fields (Maths, linguistics) this fact may be explained by the attitudinal character of PE. Many essays ,lately, have highlighted the potential of the PE to the development of attitudes and attitude styles (Prat y Soler, 2003; Pérez-Pueyo, 2005).

In conclusion, PE teachers of Primary education of the Principado de Asturias is fulfilling an administrative work of integrating the CCBB in their programs; However, this perceptive fulfillment does not necessarily mean that fundamental changes in the practice to implement the competencial framework successfully is being made. Women and young PE teachers are more receptive to the integration of the competences as well to the changes that they involve. The higher levels of specific training of CCBB together with group experiences of application in the centers do also increase PE teachers' perception and positive attitudes towards the implementation of the CCBB. It seems necessary to encourage an initial specific and permanent training of teachers as to guarantee an efficient and practical application of the framework. It is because of this that it is suggested that from the different educative institutions should be encouraged and promoted the development of the competences throughout group and

cooperative work. Future research must support these results in other population samples and different educative stages. Besides, it should also be considered how new legislative contexts may affect the process of implementation of competences.

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