

# ULRR

## Questionnaire on perceived competency-based learning for primary school students (#ICOMpri1)

Item Type	Article
Authors	Meroño, Lourdes;Calderón, Antonio;Arias-Estero, José-Luis;Méndez-Giménez, Antonio
Citation	Cultura y Educación: Culture and Education;29 (2), pp. 279-323
Download date	2026-03-13 20:16:34
Item License	<a href="https://creativecommons.org/licenses/by-nc-sa/1.0/">https://creativecommons.org/licenses/by-nc-sa/1.0/</a>
Link to Item	<a href="https://hdl.handle.net/10344/5940">https://hdl.handle.net/10344/5940</a>

## QUESTIONNAIRE ON PERCEIVED LEARNING

### Cuestionario del Aprendizaje Percibido basado en Competencias para el Alumnado de Educación Primaria (*#ICOMPri1*)

### Questionnaire on Perceived Competency-based Learning for Primary School Students (*#ICOMPri1*)

Lourdes Meroño<sup>a</sup>, Antonio Calderón<sup>b</sup>, José-Luis Arias-Estero<sup>a</sup> y Antonio Méndez-Giménez<sup>c</sup>  
<sup>a</sup>UCAM Universidad Católica de Murcia; <sup>b</sup>Universidad de Limerick; <sup>c</sup>Universidad de Oviedo

**Resumen:** El objetivo de esta investigación fue diseñar y validar un instrumento de evaluación para conocer la percepción del alumnado de Educación Primaria sobre su aprendizaje basado en competencias. Al examinar la validez de contenido ( $n = 35$  expertos), comprensión ( $n = 173$  alumnos), y constructo ( $n = 523$  alumnos) del instrumento, los resultados mostraron una adecuada calidad psicométrica, consistencia interna, fiabilidad y bondad de ajuste:  $\chi^2/df = 2.08$ ,  $TLI = 0.88$ ,  $CFI = 0.90$ ,  $GFI = 0.90$ ,  $RMSEA = 0.04$ , y  $SRMR = 0.04$ . La versión final del Cuestionario del Aprendizaje Percibido basado en Competencias para el Alumnado de Educación Primaria (*#ICOMPri1*) comprende ocho dimensiones y se compone de 27 ítems. Los resultados manifestaron la alta percepción de aprendizaje basado en competencias del alumnado de Educación Primaria. Se presenta por tanto una herramienta válida y fiable, que proporciona una visión más subjetiva del rendimiento académico del alumnado de Primaria. No obstante, en futuros trabajos sería necesario dotar de validez de criterio a partir de la comparación de los resultados de percepción con los de las pruebas internacionales de rendimiento.

**Palabras clave:** competencias básicas, proceso de enseñanza aprendizaje, escala, psicometría, rendimiento académico

**Abstract:** The purpose of this study was to design and validate an assessment tool to find out how Primary School students perceive their competency-based learning. By examining the content validity ( $n = 35$  experts), comprehension ( $n = 173$  students) and construct ( $n = 523$  students) of the instrument, the results showed correct psychometric quality, internal consistency, reliability and the adequacy of the structural model:  $\chi^2/df = 2.08$ ,  $TLI = 0.88$ ,  $CFI = 0.90$ ,  $GFI = 0.90$ ,  $RMSEA = 0.04$ , y  $SRMR = 0.04$ . The final version of the Questionnaire on Perceived Competency-based Learning of Primary School Students (*#ICOMPri1*) includes eight dimensions and 27 items. The results showed a high perceived competency-based learning of Primary School students. This is therefore a valid and reliable instrument that provides a more subjective and real vision of primary students' academic performance. Nevertheless, future studies should analyse the criterion-related validity by comparing perception results with those of international academic achievement.

**Keywords:** key competences, teaching-learning process, scale, psychometrics, academic achievement

## QUESTIONNAIRE ON PERCEIVED LEARNING

Today, the academic performance of Spanish students is below the mean of countries of the European Union and the Organisation for Economic Cooperation and Development (OCDE) (INEE, 2015). The education system is subject to a process of constant change, involving the incorporation of new learning approaches, as well as innovative methodological approaches (Monarca & Rappoport, 2013; Moya & Luengo, 2011). One of these approaches relates to competency-based teaching, learning and assessment processes, which are a topic of considerable debate among the educational community (e.g. Halász & Michel, 2011; Méndez-Alonso, Méndez-Giménez & Fernández-Río, 2015; Ramírez-García & Del Arco, 2013; Valle & Manso, 2013). Such a competency-based framework is pursued as an ultimate goal that helps students harness the potential of what they have learned to solve problems or to be able to deal with unexpected situations (Méndez-Giménez, Sierra-Arizmendiarieta, & Mañana-Rodríguez, 2013).

Initially, the 2/2006 Education Bill established eight key competences in the Primary Education curriculum (Royal Decree 1513/2006). (1) Competence in linguistic communication, (2) Mathematic competence (3) Knowledge and interaction with the natural world, (4) Information handling and digital competence, (5) Social and citizenship competence, (6) Cultural and artistic competence, (7) Learning to learn competence, and (8) Autonomy and personal initiative. However, Royal Degree 126/2014 of the Education Bill to Improve Educational Quality (LOMCE) 8/2013, reduced the key competences to seven, recuperating the headings established by the European Union some years earlier (2016): (1) Linguistic communication, (2) Mathematic competence and key competences in science and technology, (3) Digital competence, (4) Learning to learn, (5) Social and civic competence, (6) Sense of initiative and entrepreneurial spirit, and (7) Cultural awareness and expression.

Key competences are considered to be the backbone upon which all other curricular elements rest (Sierra, Méndez-Giménez & Mañana, 2013). Considering the relevance and

## QUESTIONNAIRE ON PERCEIVED LEARNING

validity of this competency-based framework within the educational context, reliable and universal indicators and assessment tools (Medina, Domínguez, & Sánchez, 2013) that enable teaching, learning and evaluation processes to be assessed from the different perspectives of those involved are of vital importance. Over recent years, competences have been evaluated from the perspective of teachers, management teams, and diagnostic tests (government authorities). Thus, teaching programmes at both a national (e.g., Bolívar & Pereyra, 2006; Escamilla, 2008; Pérez-Pueyo, 2013) and international level (e.g., Pepper, 2011; Rieckmann, 2013) have been the focus of study.

Among the most significant large-scale assessments, insofar as the number of countries participating in them, we find two studies from the International Association for the Evaluation of Educational Achievement (IEA); Trends in International Mathematics and Science Study (TIMSS), and the Progress in International Reading Literacy Study (PIRLS). Both assess student performance in the fourth year of Primary Education. Furthermore, the OCDE Programme for International Student Assessment (PISA) assesses the competences of students undertaking Compulsory Secondary School Education. Other approaches that replicate some of these assessment tools are the Diagnostic Censal Assessment Tests developed in the different autonomous communities of Spain. All these tests aim to invest the teaching, learning and assessment process with rigour and objectivity, and to orientate both students and teachers (Medina et al., 2013).

Students are considered to be the most important agents in the development of all educational changes (Méndez-Alonso et al., 2015; Ros, 2009). In view of this, in addition to the perception of other agents, such as teachers or those who manage and carry out research into education in relation to teaching, learning and assessment processes, it is also vital to find out what students think of their own competency-based learning (Serván, 2011), using suitable instruments.

## QUESTIONNAIRE ON PERCEIVED LEARNING

In the context of education, there is a gap in the literature which needs to be addressed, especially considering that the variables of student beliefs and ideologies carry the most weight in predicting academic performance (Miñano & Castejón, 2011). While recent studies have been carried out by a research group focused on the self-assessment of competences (Corpas-Reina, Gutiérrez-Arenas & Ramírez-García, 2015; Ramírez-García, Corpas-Reina & Gutiérrez-Arenas, 2013; Ramírez-García, Corpas-Reina, Amor & Serrano, 2014; Ramírez, Lorenzo, Ruiz & Vázquez, 2011), this study is framed within the need alluded to by Ramírez-García et al. (2013) concerning the need to improve the availability of valid and reliable assessment tools to analyse the perceived competency-based learning of Primary School students.

In view of the above, the aim of this study is to design and validate an assessment tool to find out how Primary School students perceive their competency-based learning.

### **Method**

#### **Procedure**

The design process and validation of this questionnaire was carried out following the indications of Carretero-Dios and Pérez (2005) (Figura 1). The analysis of the data was carried out with the IBM SPSS v22, AMOS v18, and LISREL v9.1. statistical packages.

\*\*\*Figure 1\*\*\*

**Initial creation of instrument.** The researchers met on four different occasions to plan the study and to define what and who to assess and why. The aim of this was to discuss the need, innovation, pertinence and viability of the scale to be constructed. Each researcher provided an operational definition of the construct after carrying out an in-depth review of the literature on key competences. After this, they presented their proposals which were then debated before reaching a final consensus. Following the same methodology, eight

## QUESTIONNAIRE ON PERCEIVED LEARNING

dimensions corresponding to the eight competences were decided upon (Royal Decree 1513/2006). The items were written in simple language and adapted to the target sample population of the study. The initial draft of the items and their qualitative assessment was finally drawn up after three meetings. A dual-scale design was followed for the questionnaire in line with indications advanced by Zabala and Arnau (2007): '*I'm capable of...*' and '*I like ...*' (Appendix 1).

**Content validation by experts.** Initially, three different validation rounds were carried out with experts. The first round considered the construct (completeness and specificity of construct) and its dimensions (suitability and relevance to the construct, and completeness and specificity of the definition). The second and third rounds assessed the items (suitability and relevance to the dimension and suitability of the wording). In the three rounds, quantitative (Likert scale of 1 to 10) and qualitative assessment was used. Any aspects with a degree of 50% agreement between the experts and/or a quantitative score lower than seven were modified. The experts carried out a second assessment to consider the construct, the dimensions and the items, which had been redrafted taking into account previous recommendations.

**Validity of comprehension for participants.** The descriptive statistics and level of discrimination of each item were calculated using the corrected correlation coefficient between the scores of the items and the dimensions (both for the components of theoretical relevance as well as those without). The items selected were those with a high discriminatory power, a standard deviation higher than one, mean answer scores located around the mean point of the scale (skewness and kurtosis in the range: -1, +1), and positive correlation coefficients in favour of the corresponding dimension (at least two decimal points difference).

## QUESTIONNAIRE ON PERCEIVED LEARNING

**Validity of construct.** The dimensionality of the instrument was analysed, calculating the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's sphericity test. The internal structure was studied through an exploratory factorial analysis of the main components and a confirmatory factorial analysis, using the maximum likelihood estimate. The following indicators of the fit of the structural equation model was calculated: the chi-square ratio of the degree of freedom ( $\chi^2/g.l.$ ), the Tucker-Lewis index (*TLI*), the comparative fit index (*CFI*), the good fit index (*GFI*), the Root Mean Square Error of Approximation (*RMSEA*), and the Standardized Root Mean Square Residual (*SRMR*) (Bentler, 2006; Schermelleh-Engel, Moosbrugger, & Müller, 2003).

**Reliability analysis.** Internal consistency was examined using the Cronbach alpha coefficient, the *h* index, the Omega McDonald coefficient, and glb (greatest lower bound). In addition, the composite reliability and the average variance extracted of the instrument were calculated.

**External validity.** A calculation of the descriptive statistics and a logistical regression analysis were carried out to ascertain the importance of the predictive value of the eight competences and the variables: gender (girl or boy), school year (third, fourth, fifth, sixth) and type of school (state, semi-public/state funded, private). A factorial ANOVA was also used to analyse the three independent variables (gender, school year and type of school) and the dependent variable (student perception of learning in terms of key competences). The level of statistical significance was established at  $p < 0.05$ .

**Data collection procedures.** In order to test the validity of the content, experts were contacted via email. Authorisation was obtained from the General Directorate for Educational Quality, Innovation and Attention to Diversity of the Region of Murcia to examine comprehension validity and the validity of the construct. Subsequently, the authorisation of the school heads was obtained, as well as the consent of the participating students' parents.

## QUESTIONNAIRE ON PERCEIVED LEARNING

The (anonymous) questionnaires were completed in the presence of their teachers, without any additional explanations being given besides the ones already included on the form. They were asked to indicate the following data at the top of the form: gender, class year, school, age, name of school and country of birth. The indicators to assess perceptions of learning were established at 1 (I don't agree) to 5 (I totally agree). Participants took approximately fifteen to twenty minutes to complete the questionnaire.

### **Participants**

In line with the peer-review validation method, a total number of 35 experts participated in validating the content of the questionnaire. These experts came from the following specialities: (a) 20 teachers with over 10 years' experience, with the following specialities (Royal Decree 1594/2011): Primary Education ( $n = 13$ ), Physical Education ( $n = 4$ ), Foreign Language ( $n = 2$ ), and Music ( $n = 1$ ), and (b) 15 university teachers with between 10 and 20 years' experience, specialised in different areas of Educational Sciences (Royal Decree 415/2015): Teaching and School Organisation ( $n = 2$ ), Physical Education and Sport ( $n = 11$ ), Research Methods in Education ( $n = 2$ ). Regarding the validation of comprehension, and to ensure that students interpreted it correctly, the questionnaire was applied to 173 students from year three to year six of Primary Education, from an average socio-economic background. A total of 523 students took part in the validation of the construct. A probability sampling by clusters was used, since the population was subdivided in a natural manner into unit groups depending on the kind of school and school year (Corbetta, 2007) (Table 1).

\*\*\*Table 1\*\*\*

## **Results**

### **Initial creation of instrument**

The defined construct was Primary Education students' perceptions of their own competency-based learning. Eight dimensions were selected in line with the key competences

## QUESTIONNAIRE ON PERCEIVED LEARNING

(Royal Decree 1513/2006). The initial version of the instrument comprised 48 items that had to be responded to using a Likert scale with values ranging from 1 (not at all true for me) to 5 (totally true for me). A dual-scale design was used for the questionnaire: 'I'm capable of...' and 'I like...' (Appendix 1).

### **Content validation by experts**

The experts assigned high scores for the comprehensiveness ( $M = 8.97$ ,  $SD = 1.29$ ,  $min = 7$ ,  $max = 10$ ) and specification ( $M = 8.25$ ,  $DT = 2.17$ ,  $min = 7$ ,  $max = 10$ ) of the construct. Results corroborated with qualitative contributions: (e.g. 'The construct is wide and corresponds to a clear concept from a pedagogical perspective', 'I understand the construct to be: *Student's perceptions of their learning in terms of key competences*').

The eight dimensions of the instrument were maintained, since they received scores higher than seven in 'Suitability and relevance to the dimension' ( $M = 9.14$ ,  $DT = 0.17$ ,  $min = 7$ ,  $max = 10$ ) and 'Suitability and comprehension of the wording' ( $M = 8.68$ ,  $DT = 0.10$ ,  $min = 7$ ,  $max = 10$ ). They were also given qualitative appraisals, such as: 'The dimensions are the key competences of the Royal Decree, therefore, no better option could be used in this case'. 'It is interesting to note that all the dimensions include the same number of items to be evaluated'.

Initially, the items were presented on a dual-scale, differentiating between 'I'm capable of...' and 'I like...'. However, the experts recommended uniting 'I'm capable of and I like...', since they shared the same idea: 'The concept of competency includes a dual attitudinal dimension: *'to know how to and to like'* (Appendix 2).

The items were valued positively by the experts in 'Suitability and relevance to the dimension' ( $M = 8.14$ ,  $SD = 1.99$ ,  $min = 7$ ,  $max = 10$ ) and 'Suitability and comprehension of the wording' ( $M = 8.21$ ,  $SD = 1.67$ ,  $min = 7$ ,  $max = 10$ ). Seven items were eliminated (items 8, 10, 11, 23, 25, 40, 48), after receiving mean scores lower than seven, which could have led

## QUESTIONNAIRE ON PERCEIVED LEARNING

to comprehension problems or could have been interpreted ambiguously. Qualitative appraisals reinforced the quality of the instrument, for example, 'This is a very thoroughly elaborated and high quality study with future perspectives', 'I think that asking students to self-assess in relation to their acquisition of competences is highly relevant'. The second version of the questionnaire was then drawn up with 41 items.

### **Validation of comprehension by participants.**

The descriptive results of the items showed adequate comprehension validity by the participants. However, four items (22, 31, 39, 45) were eliminated with standard deviation scores lower than one, mean scores a long way from the mean point of the scale, and coefficients with skewness and kurtosis outside the range (-1, 1). According to the results, no significant statistical differences were found between students who completed the questionnaire with one scale (Appendix 1) and those with the dual-scale (Appendix 2); apart from the fact that students found it easier to respond to the single scale questionnaire. In view of the results obtained and the previous recommendations provided by the experts, both scales were unified into 'I'm capable of and I like ...'. Finally, the third version of the questionnaire was drawn up with 37 items.

The results of the discrimination indexes of the scale and of the corrected item-total correlation were suitable since they were higher than 0.40. As a result, no items were eliminated from the questionnaire (Carretero-Dios et al., 2005) (Table 2).

\*\*\*Table 2\*\*\*

### **Validity of construct**

The study of the dimensionality of the instrument confirmed the suitability of the Kaiser-Meyer-Olkin sampling ( $KMO = 0.90$ ) and Bartlett's sphericity test ( $p < 0.00$ ). In the exploratory factorial analysis, 27 items were statistically grouped into eight components, representing the eight key competences of which the table was composed (Table 3).

\*\*\*Table 3\*\*\*

## QUESTIONNAIRE ON PERCEIVED LEARNING

The exploratory factorial analysis showed eight eigenvalues with adequate variance percentages and saturation values (Table 4). The minimum value of the saturation values was 0.4 and the maximum 0.74.

\*\*\*Table 4\*\*\*

The results of the exploratory factorial analysis also showed a high relation between the items and the theoretical relevance factor, given that the items were statistically grouped into the eight components that represented the eight key competences (Figure 2).

Nevertheless, ten items were eliminated (3, 5, 18, 20, 26, 27, 33, 34, 41, 42), since they did not fit with the dimensions of theoretical relevance.

\*\*\*Figure 2\*\*\*

The indexes of the confirmatory factorial analysis showed suitable goodness of fit (Figure 3):  $\chi^2/df = 2.08$ ,  $TLI = 0.88$ ,  $CFI = 0.90$ ,  $GFI = 0.90$ ,  $RMSEA = 0.04$ , and  $SRMR = 0.04$ . The TLI index was the only one that did not achieve the minimum recommended score by two decimal points. The fourth version of the questionnaire was drawn up with 27 items.

\*\*\*Figure 3\*\*\*

### **Reliability analysis**

Cronbach alpha reliability coefficients higher than 0.70 were presented in the eight dimensions, as well as an  $h$  index of 0.86, an Omega McDonald coefficient of 0.92, and a glb score of 0.91. Evidence of internal consistency was presented with reliability indexes higher than 0.70 and VME scores higher than 0.50 in the eight dimensions. Finally, the final version of the questionnaire was drawn up with 27 items. D1: Competence in linguistic communication: 5, 11, 17; D2: Mathematical competence: 7, 12, 14, 18; D3: Knowledge and interaction with the natural world: 2, 8, 10; D4: Information handling and digital competence: 6, 23, 24, 25; D5: Social competence and citizenship: 4, 21, 22; D6: Cultural and artistic competence: 9, 13, 16; D7: Learning to learn competence: 3, 20, 26, 27; and D8: Autonomy and personal initiative: 1, 15, 19 (Appendix 3).

## QUESTIONNAIRE ON PERCEIVED LEARNING

### **External validity**

The statistical results showed the high perception of competency-based learning among Primary Education students (Table 5). Statistically significant differences were found according to genre in the mathematical competence, in favour of males. Similarly, a greater perception was found in relation to digital competence, and cultural and artistic competence, this time in favour of females. Moreover, the results showed statistically significant differences depending on the kind of school in relation to linguistic competence, knowledge and interaction with the natural world, and autonomy and personal initiative, in favour of students from government-subsidised semi-private schools. However, students from state schools presented levels of greater perception in cultural and artistic competence. Furthermore, in relation to year of study, statistically significant differences were found in the learning to learn competence in favour of students in the fourth year of Primary Education.

\*\*\*Table 5\*\*\*

### **Discussion**

The aim of this study was to design and validate an assessment tool to find out how Primary School students perceive their competency-based learning. The initial creation of the instrument was carried out by researchers after justifying the study and establishing a conceptual delimitation of the eight dimensions corresponding to the eight key competences (Royal Decree 1513/2006). The items were written in simple language and adapted to the target sample population of the study. The instrument was designed on a Likert scale with five possible responses, in the same way as Ramírez-García et al. (2013), in their validation of the AUTOCOMB scale to find out the opinion of year six Primary Education students concerning their competence levels.

Content validity was obtained through the experts' qualitative and quantitative evaluation of the construct, the dimensions, and the items of the assessment instrument. Any

## QUESTIONNAIRE ON PERCEIVED LEARNING

aspects with a degree of 50% agreement between the experts and/or a quantitative score lower than seven were modified (Bulger & Housner, 2007). Results related to content validity were suitable and coincided with those manifested in the validation of assessment instruments of student perception (Palacios, Arias & Arias, 2014; Pertegal, Oliva & Hernando, 2015).

Comprehension validity was confirmed by applying the second version of the questionnaire to Primary Education students in order to confirm that it could be interpreted correctly by the target participants. As recommended by Carretero-Dios et al. (2005), correlation coefficients that reported positive differences in favour of the theoretical relevance dimension were considered suitable.

Construct validity was corroborated with the results from the exploratory factorial analysis, as were the suitability of the sampling, sphericity and multivariate normality (Timmerman & Lorenzo-Seva, 2011). This study used two methods of oblique rotation, direct Oblimin and Promin, to obtain the maximum simplicity in the interpretation of the factorial solution (Lloret-Segura, Ferreres-Traver, Hernández-Baeza, & Tomás-Marco, 2014). The indexes of the confirmatory factorial analysis verified the adequate fit of the model designed. The  $\chi^2/df$  value was between 2 and 3, the RMSEA index was lower than or equal to 0.05, and the goodness of fit parameters presented optimum values by being higher than or equal to 0.90 (Bentler, 2006; Cea, 2002; Schermelleh-Engel et al., 2003; Schumacker & Lomax, 2004). Different authors consider that the parameters of confirmatory analyses should be set at 1 (Hooper, Coughlan, & Mullen, 2008; Ruiz, Pardo, & San Martín, 2010). However, other psychometric experts agree that 0.95 is too restrictive a cut-off point for testing complex models and using real data as opposed to simulated data (Marsh, Hau, & Grayson, 2005).

This kind of analysis is mainly used to contrast models that propose causal relations

## QUESTIONNAIRE ON PERCEIVED LEARNING

between variables in the field of psychology (Ruiz et al., 2010). In view of this, when analysing the psychometric properties of the questionnaire, it is important to take into account the suitability of the goodness of fit parameters, even though these are immersed within the complex context of education. Results equal to or higher than those found in questionnaires validated within the context of Primary Education were obtained (e.g., García-Bacete, Ferrá, Monjas, & Marande, 2014; Herrmann, Gerlach, & Seelig, 2015; Ramírez-García et al., 2014), and Secondary Education (e.g., Álvarez-García, Núñez, Rodríguez, Álvarez, & Dobarro, 2011; Méndez-Giménez, Fernández-Río, & Cecchini-Estrada, 2014; Moreno-Murcia, Ruiz, & Vera, 2015).

In the reliability analysis, Cronbach alpha values showed acceptable internal consistency (Carretero-Dios et al., 2005), and valid and reliable indexes located around the 0.70 mark (Subramaniam & Silverman, 2000). Other questionnaires, such as the one validated by Ramírez-García et al. (2013) obtained low Cronbach alpha scores in the competences knowledge and interaction with the natural world, social and citizenship, and autonomy and personal initiative.

An adequate level was also obtained in the *h* index which, according to Hancock and Mueller (2001), corroborates the reliability of the scale. These results were similar to those found in other validations in the field of education (e.g., Ferrándiz, Hernández, Bermejo, Ferrando, & Sáinz, 2012; Méndez-Alonso, Fernández-Río, Méndez-Giménez, & Prieto, 2015; Palacios et al., 2014). The reliability of the instrument was adequate, indicating the relevance of the results shown during the process of validating the questionnaire (Hancock et al., 2001). According to the empirical evidence, the instrument showed satisfactory and adequate psychometric quality in view of the context and purpose it is intended for.

The results showed that students from year three to year six of Primary Education have a high perception of competency-based learning. These results were not consistent with

## QUESTIONNAIRE ON PERCEIVED LEARNING

the findings of international assessment tests in which Spanish students obtained low scores which were lower than the mean of the participating countries from the European Union and the OCDE (MECD, 2011). This could point to a lack of connection between the results of international assessments and the perception of the students who participated in this study. This lack of connection could be explained if we take into account the aspects mentioned previously; the greater objectivity presupposed by international assessments in contrast to the inherent subjectivity of students' perceptions (Medina et al., 2013).

These discrepancies could also be attributed to the over-assessment or overprotection of students by their immediate surroundings. As indicated by Fuentes, Alarcón, Gracia and García (2015), an authoritative and indulgent style of parenting may result in high levels of personal competence in students which does not always correspond to the real situation.

Students' perceptions of competency-based learning were shown to be influenced by the gender variable. Boys showed more commitment to mathematics, while girls showed higher levels in relation to digital competence and cultural and artistic competence. These results are in line with those of the TIMSS and PIRLS tests at Primary level (Martin & Mullis, 2013) and PISA tests at Secondary level (OCDE, 2014). The small inequalities in achievement according to gender have generated interest in the scientific community. Ramírez-García et al. (2014) consider gender to play a significant role in perceptions of learning in students of year six of Primary Education in relation to linguistic and mathematical competence. These differences may be mainly due to social factors, as indicated by Martínez-García and Córdoba (2011).

Year of study affected students' perceptions of learning, in favour of students in year four of Primary Education, only in relation to the learning to learn competence. These results are in line with those highlighted in the PIRLS and TIMSS reports (MECD, 2011), in which the contents of the different educational levels were found to overlap considerably and to be

## QUESTIONNAIRE ON PERCEIVED LEARNING

integrated within the curriculum. As a result, in general, no statistically significant differences appeared when assessing students' learning according to school year (or in terms of their perception). Students' perception of learning was also affected by the type of school in relation to linguistic competence, knowledge and interaction with the natural world, and autonomy and personal initiative, in favour of students from government-subsidised private schools, and in cultural and artistic competence in favour of students from state schools. On similar lines, according to the PIRLS and TIMSS reports (MECD, 2011; INEE, 2016), students from private/semi-private schools obtain better results than students from state schools, even though the difference in score in favour of private schools disappears when we control the socio-economic and cultural index.

In conclusion, the psychometric properties of this study have shown the validity of the instrument in terms of content, comprehension, construct and reliability for assessing students' perceptions of their competency-based learning. The tool is presented in the hope that future studies will develop this theme further, studying the question of perception from the viewpoint of other agents within the educational community.

Nevertheless, this study should be understood as a first approximation and, as such, some of its limitations will need to be explored further before being duly validated. Among these, it should be applied to a greater sample, with a sampling procedure appropriate for greater sizes. It should also be tested in different contexts and/or educational stages, analysing in depth its effect on the variables analysed (gender, year of study, type of school), as well as on other factors, in order to determine the external validity of the instrument. Finally, a more exhaustive analysis should be carried out of the relation between perceived competences and academic results in international assessment tests. Further studies are therefore needed to confirm the validity and reliability of the instrument validated here, after applying it to a greater sample size and geographical area. In summary, further work is

## QUESTIONNAIRE ON PERCEIVED LEARNING

needed to shed light on the relations between self-perceived competences and the competences shown in achievement tests, to examine the relation between them, and to see if such instruments may have predictive value in this respect.

## QUESTIONNAIRE ON PERCEIVED LEARNING

This study is part of the project *Las competencias básicas en Educación Primaria Percepción del profesorado y del alumnado. Propuesta de intervención desde el modelo de Educación Deportiva Key competences in Primary Education. Teacher and student perceptions. Intervention proposal based on the Sport Education model'* (DEP 2012-33923), funded by the Spanish Ministry of Economy and Competitiveness.

QUESTIONNAIRE ON PERCEIVED LEARNING

Table 1

*Participants according to Gender, School Year and Type of School*

	<i>Gender</i>		<i>School year</i>				<i>Type of school</i>	
	Boys	Girls	Third year	Fourth year	Fifth year	Sixth year	State	Semi-private
Sample 1 (n=173)	81 46.82%	92 53.18%	41 23.69%	45 26.01%	43 24.85%	44 25.45%	97 56.06%	76 43.94%
Sample 2 (n=523)	286 54.68%	237 45.31%	94 17.97%	94 17.97%	193 36.90%	142 27.16%	353 67.49%	170 32.51%
Total (n=696)	367 52.72%	329 47.28%	135 19.39%	139 19.97%	236 33.90%	186 26.75%	450 64.65%	246 35.35%

*Note.* Sample 1 (comprehension validity). Sample 2 (construct validity).

QUESTIONNAIRE ON PERCEIVED LEARNING

Table 2

*Analysis of the Discrimination Index of the Scale*

Dimensions and items	Mean if we eliminate the element	Variance if we eliminate the element	Corrected item-total correlation	Cronbach alpha if we eliminate the element
<i>Competence in linguistic communication</i>				
Item 7	110.50	182.92	0.48	0.88
Item 16	110.52	177.90	0.52	0.90
Item 29	110.70	176.12	0.53	0.88
<i>Mathematical competence:</i>				
Item 12	110.82	179.46	0.47	0.87
Item 17	110.51	180.26	0.45	0.88
Item 21	110.49	180.24	0.44	0.89
Item 30	110.50	179.20	0.43	0.91
<i>Knowledge and interaction with the natural world</i>				
Item 2	110.70	178.90	0.46	0.92
Item 13	110.51	180.59	0.43	0.92
Item 15	110.60	178.79	0.50	0.91
<i>Information handling and digital competence</i>				
Item 9	110.92	175.18	0.49	0.87
Item 38	110.67	177.53	0.53	0.90
Item 43	111.21	174.72	0.50	0.90
Item 44	110.74	178.08	0.43	0.92
<i>Social competence and citizenship</i>				
Item 6	110.48	181.60	0.42	0.92
Item 36	110.50	180.74	0.46	0.91
Item 37	110.10	186.75	0.43	0.89
<i>Cultural and artistic competence</i>				
Item 14	110.76	179.34	0.45	0.88
Item 19	110.35	182.45	0.40	0.90
Item 28	110.71	179.16	0.43	0.90
<i>Learning to learn competence</i>				
Item 4	110.46	181.48	0.41	0.91
Item 35	110.33	181.55	0.45	0.88
Item 46	110.24	180.30	0.59	0.91
Item 47	110.23	182.09	0.53	0.91
<i>Autonomy and personal initiative</i>				
Item 1	110.87	180.32	.44	0.90
Item 24	110.50	182.53	.47	0.90
Item 32	110.74	178.99	.43	0.91

## QUESTIONNAIRE ON PERCEIVED LEARNING

Table 3

### *Exploratory Factorial Analysis of the Eight Dimensions of the Scale*

Dimensions and items	Factor
<i>Competence in linguistic communication</i>	
Item 7. I'm capable of and I like reading and understanding class texts without making mistakes	0.72
Item 16. I'm capable of and I like communicating in another language (read, listen, write and say simple sentences) with my classmates.	0.64
Item 29. I'm capable of and I like giving my opinion on stories and explaining class activities to one of my classmates	0.65
<i>Mathematical competence:</i>	
Item 12. I'm capable of and I like doing calculations in class with whole numbers and numbers with decimal points	0.74
Item 17. I'm capable of and I like recognising different lines (curves and straight lines), geometrical figures and angles in class activities	0.53
Item 21. I'm capable of and I like using units of litres, metres and grams correctly in class activities	0.67
Item 30. I'm capable of and I like solving problems using additions, subtractions, multiplications and divisions in class activities	0.65
<i>Knowledge and interaction with the natural world</i>	
Item 2. I'm capable of and I like knowing the parts and functions of the human body, for example, its different organs and systems	0.62
Item 13. I'm capable of and I like doing little experiments in class and drawing conclusions.	0.51
Item 15. I'm capable of and I like understanding plans and maps we work on in class	0.63
<i>Information handling and digital competence</i>	
Item 9. I'm capable of and I like looking for information about class subjects, for example in encyclopedias or on the internet	0.68
Item 38. I'm capable of and I like selecting what's important from the information I find in books or on the internet for class activities	0.64
Item 43. I'm capable of and I like doing summaries of the internet news we read in class	0.63
Item 44. I'm capable of and I like downloading information from the internet that will help me do class activities	0,578
<i>Social competence and citizenship</i>	
Item 6. I'm capable of and I like respecting the opinion of my classmates, even if they have different opinions than me	0.66
Item 36. I'm capable of and I like reaching agreements with my classmates, even if they have different opinions than me	0.65
Item 37. I'm capable of and I like apologising when I offend a classmate and thanking them when they help me	0.57
<i>Cultural and artistic competence</i>	
Item 14. I'm capable of and I like putting on theatre plays or dancing with my classmates	0.68
Item 19. I'm capable of and I like practicing traditional games from my country or other countries in class	0.61

## QUESTIONNAIRE ON PERCEIVED LEARNING

Item 28. I'm capable of and I like expressing myself with my body, with music, or through drawings in class	0.59
<hr/> <i>Learning to learn competence</i> <hr/>	
Item 4. I'm capable of and I like organising class homework so that I don't always leave it till the last minute	0.71
Item 35. I'm capable of and I like learning from my mistakes in class activities to be able to correct them	0.63
Item 46. I'm capable of and I like making an effort to learn class activities	0.52
Item 47. I'm capable of and I like concentrating to learn the most important things from class activities	0.56
<hr/> <i>Autonomy and personal initiative</i> <hr/>	
Item 1. I'm capable of and I like carrying out class activities without asking for help	0.61
Item 24. I'm capable of and I like saying what I think when I talk to my classmates	0.60
Item 32. I'm capable of and I like explaining how I've done class activities to my classmates	0.56
<hr/>	

QUESTIONNAIRE ON PERCEIVED LEARNING

Table 4

*Statistics for the Eigenvalue, Total Variance and Saturation Values of the Exploratory*

*Factorial Analysis*

Dimensions	Direct Oblimin rotation			Promin rotation		
	Eigenvalue	(%) Total variance	Saturation values	Eigenvalue	(%) Total variance	Saturation values
Competence in linguistic communication	4.13	14.71	0.44-0.72	4.12	14.52	0.42-0.70
Mathematical competence:	4.16	12.87	0.53-0.74	4.18	12.32	0.65-0.74
Knowledge and interaction with the natural world	4.16	12.04	0.42-0.51	4.10	11.28	0.40-0.60
Information handling and digital competence	4.12	13.54	0.57-0.63	4.15	14.20	0.55-0.61
Social competence and citizenship	4.47	10.86	0.57-0.65	4.45	10.77	0.53-0.62
Cultural and artistic competence	4.43	12.87	0.59-0.61	4.39	11.97	0.60-0.68
Learning to learn competence	4.47	11.70	0.43-0.71	4.48	11.96	0.68-0.72
Autonomy and personal initiative	4.42	11.41	0.41-0.56	4.25	11.39	0.41-0.53

QUESTIONNAIRE ON PERCEIVED LEARNING

Table 5

*Descriptive statistics of Student Perception according to the Study Variables*

	<i>M(DS) Dimensiones</i>							
	D1	D2	D3	D4	D5	D6	D7	D8
<b>Gender</b>								
Boy	4.03(0.92)	4.21(0.75)	4.11(0.76)	4.00(0.91)	4.37(0.68)	4.03(0.82)	4.42(0.75)	4.10(0.74)
Girl	4.25(0.81)	4.09(0.79)	4.23(0.66)	4.26(0.66)	4.59(0.59)	4.50(0.62)	4.57(0.62)	4.22(0.59)
<i>O:</i>	0.15(0.26)	0.76(0.00)*	0.14(0.43)	0.31(0.03)*	0.26(0.15)	0.92(0.00)*	0.09(0.62)	0.03(0.84)
$\eta^2$	0.13	0.16	0.18	0.14	0.18	0.16	0.18	0.17
<b>Year of study</b>								
Third year	4.26(0.78)	4.00(0.86)	4.24(0.86)	4.15(0.82)	4.53(0.71)	4.39(0.69)	4.56(0.63)	4.29(0.66)
Fourth year	4.06(0.94)	4.30(0.74)	4.17(0.69)	4.07(0.91)	4.41(0.72)	4.23(0.78)	4.60(0.64)	4.11(0.74)
Fifth year	4.25(0.82)	4.23(0.72)	4.18(0.65)	4.15(0.79)	4.49(0.55)	4.34(0.72)	4.48(0.71)	4.25(0.66)
Sixth year	3.93(0.95)	4.06(0.78)	4.08(0.71)	4.08(0.77)	4.44(0.69)	4.03(0.84)	4.36(0.75)	3.97(0.66)
<i>F(p)</i>	0.04(0.74)	0.19(0.18)	0.10(0.54)	0.16(0.22)	0.18(0.29)	0.17(0.24)	0.46(0.01)*	0.07(0.67)
$\eta^2$	0.13	0.14	0.17	0.13	0.17	0.14	0.18	0.16
<b>Type of school</b>								
State	4.07(0.90)	4.17(0.79)	4.13(0.76)	4.14(0.82)	4.46(0.69)	4.27(0.75)	4.50(0.70)	4.10(0.71)
Semi-private	4.25(0.82)	4.14(0.73)	4.24(0.62)	4.08(0.79)	4.49(0.57)	4.19(0.80)	4.45(0.69)	4.28(0.61)
<i>F(p)</i>	0.32(0.02)*	0.24(0.11)	0.33(0.06)*	0.22(0.10)	0.09(0.61)	0.34(0.02)*	0.32(0.67)	0.56(0.00)*
$\eta^2$	0.14	0.15	0.18	0.14	0.18	0.15	0.17	0.18

Note. M=Mean, SD:Standard deviation, \*:  $p < 0.05$ , D1: Competence in linguistic

communication, D2: Mathematical competence, D3: Knowledge and interaction with the natural world. D4: Information handling and digital competence, D5: Social competence and citizenship, D6: Cultural and artistic competence, D7: Learning to learn competence, D8: Autonomy and personal initiative.

# QUESTIONNAIRE ON PERCEIVED LEARNING

## Appendix 1

### Initial Version of Instrument with two Scales (#ICOMpri1)

Chico  Chica  Curso  Edad  Colegio  Localidad

Por favor, contesta con sinceridad rodeando con un círculo el número que mejor refleje tu opinión. Para ello debes tener en cuenta las posibles respuestas:

1. NADA CIERTO PARA MÍ    
 2. LIGERAMENTE CIERTO PARA MÍ    
 3. MODERADAMENTE CIERTO PARA MÍ    
 4. MUY CIERTO PARA MÍ    
 5. TOTALMENTE CIERTO PARA MÍ

Soy capaz de...					Quiero...					Ítems
1	2	3	4	5	1	2	3	4	5	
1	2	3	4	5	1	2	3	4	5	(1) Realizar las actividades de clase sin pedir ayuda
1	2	3	4	5	1	2	3	4	5	(2) Conocer las partes y funciones del cuerpo humano, por ejemplo, los aparatos y sistemas
1	2	3	4	5	1	2	3	4	5	(3) Resolver los problemas que ocurren entre compañeros de clase
1	2	3	4	5	1	2	3	4	5	(4) Organizar los deberes de clase para no dejarlos siempre a última hora
1	2	3	4	5	1	2	3	4	5	(5) Hacer resúmenes y esquemas para estudiar y aprender lo que trabajamos en clase
1	2	3	4	5	1	2	3	4	5	(6) Respetar la opinión de mis compañeros de clase aunque piensen diferente a mí
1	2	3	4	5	1	2	3	4	5	(7) Leer textos de clase sin equivocarme
1	2	3	4	5	1	2	3	4	5	(8) Entender lo que leo en las actividades de clase
1	2	3	4	5	1	2	3	4	5	(9) Buscar información sobre las asignaturas de clase, por ejemplo, en enciclopedias o en internet
1	2	3	4	5	1	2	3	4	5	(10) Cuidar el medio ambiente en el colegio
1	2	3	4	5	1	2	3	4	5	(11) Cuidar mi salud en el colegio
1	2	3	4	5	1	2	3	4	5	(12) Hacer cálculos en clase con números enteros y con decimales
1	2	3	4	5	1	2	3	4	5	(13) Realizar pequeños experimentos de clase
1	2	3	4	5	1	2	3	4	5	(14) Representar una obra de teatro o un baile con mis compañeros de clase
1	2	3	4	5	1	2	3	4	5	(15) Entender planos y mapas que trabajamos en clase
1	2	3	4	5	1	2	3	4	5	(16) Comunicarme en otro idioma (leer, escuchar, escribir y decir frases sencillas) con mis compañeros de clase
1	2	3	4	5	1	2	3	4	5	(17) Reconocer diferentes líneas (rectas y curvas), figuras geométricas y ángulos en las actividades de clase
1	2	3	4	5	1	2	3	4	5	(18) Respetar la cultura (bailes y sus tradiciones) de los compañeros de clase de otros países
1	2	3	4	5	1	2	3	4	5	(19) Practicar en clase juegos tradicionales de mi país y de otros países
1	2	3	4	5	1	2	3	4	5	(20) Entender datos de tablas y en gráficos en las actividades de clase
1	2	3	4	5	1	2	3	4	5	(21) Utilizar adecuadamente las unidades del litro, metro y gramo en las actividades de clase
1	2	3	4	5	1	2	3	4	5	(22) Entender una obra de teatro o un baile de los que hacemos en clase
1	2	3	4	5	1	2	3	4	5	(23) Dar mi opinión sobre una obra de teatro o un baile de los que hacemos en clase
1	2	3	4	5	1	2	3	4	5	(24) Hablar con mis amigos de clase para expresar lo que pienso
1	2	3	4	5	1	2	3	4	5	(25) Hablar con mis amigos de clase respetando el turno de palabra
1	2	3	4	5	1	2	3	4	5	(26) Realizar las actividades de clase con imaginación y creatividad
1	2	3	4	5	1	2	3	4	5	(27) Describir las características de mi clase
1	2	3	4	5	1	2	3	4	5	(28) Expresarme con el cuerpo, con música o mediante dibujos en el colegio
1	2	3	4	5	1	2	3	4	5	(29) Opinar sobre una historia y explicar una actividad de clase a algún compañero
1	2	3	4	5	1	2	3	4	5	(30) Hacer problemas utilizando sumas, restas, multiplicaciones y divisiones en las actividades de clase
1	2	3	4	5	1	2	3	4	5	(31) Entender una historia o una actividad de clase cuando me la cuentan mis compañeros
1	2	3	4	5	1	2	3	4	5	(32) Explicar a mis compañeros cómo he hecho las actividades de clase
1	2	3	4	5	1	2	3	4	5	(33) Realizar las actividades de clase utilizando el ordenador o la pizarra digital
1	2	3	4	5	1	2	3	4	5	(34) Dibujar diferentes figuras geométricas y calcular su perímetro en las actividades de clase
1	2	3	4	5	1	2	3	4	5	(35) Aprender de mis errores en las actividades de clase para corregirlos y mejorarlos
1	2	3	4	5	1	2	3	4	5	(36) Llegar a acuerdos con mis compañeros de clase, aunque piensen diferente a mí
1	2	3	4	5	1	2	3	4	5	(37) Pedir perdón cuando ofendo a algún compañero de clase y darle las gracias cuando me ayuda
1	2	3	4	5	1	2	3	4	5	(38) Seleccionar lo importante de la información que he encontrado en libros o internet para las actividades de clase
1	2	3	4	5	1	2	3	4	5	(39) Aceptar las normas de convivencia de mi clase
1	2	3	4	5	1	2	3	4	5	(40) Cumplir las normas de convivencia de mi clase
1	2	3	4	5	1	2	3	4	5	(41) Esforzarme en colaborar con los compañeros para hacer bien las actividades de clase
1	2	3	4	5	1	2	3	4	5	(42) Utilizar durante las clases recursos tecnológicos para aprender más, por ejemplo tablets o pizarra digital
1	2	3	4	5	1	2	3	4	5	(43) Hacer un resumen de las noticias de internet que leemos en clase
1	2	3	4	5	1	2	3	4	5	(44) Descargarme información que me interesa, cuando utilizamos internet en clase
1	2	3	4	5	1	2	3	4	5	(45) Aprender de mis propios errores cuando me equivoco en las actividades de clase
1	2	3	4	5	1	2	3	4	5	(46) Esforzarme para conseguir aprender las actividades de clase
1	2	3	4	5	1	2	3	4	5	(47) Estar concentrado para aprender lo más importante de las actividades de clase
1	2	3	4	5	1	2	3	4	5	(48) Pensar en cómo he hecho las actividades que nos mandan en clase y ver si están bien o no

1 Competencia en comunicación lingüística: 7, 8, 16, 25, 29, 31.  
 2 Competencia matemática: 12, 17, 20, 21, 30, 34.  
 3 Conocimiento e interacción con el mundo físico: 2, 10, 11, 13, 15, 27.  
 4 Tratamiento de la información y competencia digital: 9, 33, 38, 42, 43, 44.  
 5 Competencia social y ciudadana: 3, 6, 36, 37, 39, 40.  
 6 Competencia cultural y artística: 14, 18, 19, 22, 23, 28.  
 7 Competencia para aprender a aprender: 4, 5, 35, 45, 46, 47.  
 8 Autonomía e iniciativa personal: 1, 24, 26, 41, 32, 48.

Muchas gracias por tu colaboración

# QUESTIONNAIRE ON PERCEIVED LEARNING

## Appendix 2

### Initial version of the Instrument with one Scale (#ICOMpri1)

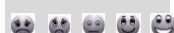
☐

Chico  Chica  Curso  Edad  Colegio  Localidad

Por favor, contesta con sinceridad rodeando con un círculo el número que mejor refleje tu opinión. Para ello debes tener en cuenta las posibles respuestas:



Soy capaz y quiero...



Ítems

1	2	3	4	5	Ítems
1	2	3	4	5	(1) Realizar las actividades de clase sin pedir ayuda
1	2	3	4	5	(2) Conocer las partes y funciones del cuerpo humano, por ejemplo, los aparatos y sistemas
1	2	3	4	5	(3) Resolver los problemas que ocurren entre compañeros de clase
1	2	3	4	5	(4) Organizar los deberes de clase para no dejarlos siempre a última hora
1	2	3	4	5	(5) Hacer resúmenes y esquemas para estudiar y aprender lo que trabajamos en clase
1	2	3	4	5	(6) Respetar la opinión de mis compañeros de clase aunque piensen diferente a mí
1	2	3	4	5	(7) Leer textos de clase sin equivocarme
1	2	3	4	5	(8) Entender lo que leo en las actividades de clase
1	2	3	4	5	(9) Buscar información sobre las asignaturas de clase, por ejemplo, en enciclopedias o en internet
1	2	3	4	5	(10) Cuidar el medio ambiente en el colegio
1	2	3	4	5	(11) Cuidar mi salud en el colegio
1	2	3	4	5	(12) Hacer cálculos en clase con números enteros y con decimales
1	2	3	4	5	(13) Realizar pequeños experimentos de clase
1	2	3	4	5	(14) Representar una obra de teatro o un baile con mis compañeros de clase
1	2	3	4	5	(15) Entender planos y mapas que trabajamos en clase
1	2	3	4	5	(16) Comunicarme en otro idioma (leer, escuchar, escribir y decir frases sencillas) con mis compañeros de clase
1	2	3	4	5	(17) Reconocer diferentes líneas (rectas y curvas), figuras geométricas y ángulos en las actividades de clase
1	2	3	4	5	(18) Respetar la cultura (bailes y sus tradiciones) de los compañeros de clase de otros países
1	2	3	4	5	(19) Practicar en clase juegos tradicionales de mi país y de otros países
1	2	3	4	5	(20) Entender datos de tablas y en gráficos en las actividades de clase
1	2	3	4	5	(21) Utilizar adecuadamente las unidades del litro, metro y gramo en las actividades de clase
1	2	3	4	5	(22) Entender una obra de teatro o un baile de los que hacemos en clase
1	2	3	4	5	(23) Dar mi opinión sobre una obra de teatro o un baile de los que hacemos en clase
1	2	3	4	5	(24) Hablar con mis amigos de clase para expresar lo que pienso
1	2	3	4	5	(25) Hablar con mis amigos de clase respetando el turno de palabra
1	2	3	4	5	(26) Realizar las actividades de clase con imaginación y creatividad
1	2	3	4	5	(27) Describir las características de mi clase
1	2	3	4	5	(28) Expresarme con el cuerpo, con música o mediante dibujos en el colegio
1	2	3	4	5	(29) Opinar sobre una historia y explicar una actividad de clase a algún compañero
1	2	3	4	5	(30) Hacer problemas utilizando sumas, restas, multiplicaciones y divisiones en las actividades de clase
1	2	3	4	5	(31) Entender una historia o una actividad de clase cuando me la cuentan mis compañeros
1	2	3	4	5	(32) Explicar a mis compañeros cómo he hecho las actividades de clase
1	2	3	4	5	(33) Realizar las actividades de clase utilizando el ordenador o la pizarra digital
1	2	3	4	5	(34) Dibujar diferentes figuras geométricas y calcular su perímetro en las actividades de clase
1	2	3	4	5	(35) Aprender de mis errores en las actividades de clase para corregirlos y mejorarlos
1	2	3	4	5	(36) Llegar a acuerdos con mis compañeros de clase, aunque piensen diferente a mí
1	2	3	4	5	(37) Pedir perdón cuando ofendo a algún compañero de clase y darle las gracias cuando me ayuda
1	2	3	4	5	(38) Seleccionar lo importante de la información que he encontrado en libros o internet para las actividades de clase
1	2	3	4	5	(39) Aceptar las normas de convivencia de mi clase
1	2	3	4	5	(40) Cumplir las normas de convivencia de mi clase
1	2	3	4	5	(41) Esforzarme en colaborar con los compañeros para hacer bien las actividades de clase
1	2	3	4	5	(42) Utilizar durante las clases recursos tecnológicos para aprender más, por ejemplo tablets o pizarra digital
1	2	3	4	5	(43) Hacer un resumen de las noticias de internet que leemos en clase
1	2	3	4	5	(44) Descargarme información que me interesa, cuando utilizamos internet en clase
1	2	3	4	5	(45) Aprender de mis propios errores cuando me equivoco en las actividades de clase
1	2	3	4	5	(46) Esforzarme para conseguir aprender las actividades de clase
1	2	3	4	5	(47) Estar concentrado para aprender lo más importante de las actividades de clase
1	2	3	4	5	(48) Pensar en cómo he hecho las actividades que nos mandan en clase y ver si están bien o no

1 Competencia en comunicación lingüística: 7, 8, 16, 25, 29, 31.

2 Competencia matemática: 12, 17, 20, 21, 30, 34.

3 Conocimiento e interacción con el mundo físico: 2, 10, 11, 13, 15, 27.

4 Tratamiento de la información y competencia digital: 9, 33, 38, 42, 43, 44.

5 Competencia social y ciudadana: 3, 6, 36, 37, 39, 40.

6 Competencia cultural y artística: 14, 18, 19, 22, 23, 28.

7 Competencia para aprender a aprender: 4, 5, 35, 45, 46, 47.

8 Autonomía e iniciativa personal: 1, 24, 26, 41, 32, 48.



Muchas gracias por tu colaboración

☐

# QUESTIONNAIRE ON PERCEIVED LEARNING

## Appendix 3

### Final Version of the Instrument (#ICOMpri1)

**Género**

Chico...

Chica...

**Curso**

Tercero...  Quinto...

Cuarto...  Sexto...

**Colegio**

Público .....  Privado...

Concertado .....

marca así en círculo

así no marques

**Edad (años)**

**Nombre del Colegio**

**País de nacimiento**

Por favor, contesta con sinceridad rellenando el círculo, como en el ejemplo, la opción que mejor refleje tu opinión. Para ello debes tener en cuenta las posibles respuestas que se indican a continuación:

**1**

**NADA CIERTO PARA MÍ**

**2**

**LIGERAMENTE CIERTO PARA MÍ**

**3**

**MODERADAMENTE CIERTO PARA MÍ**

**4**

**MUY CIERTO PARA MÍ**

**5**

**TOTALMENTE CIERTO PARA MÍ**

	1	2	3	4	5
1. Soy capaz y quiero realizar las actividades de clase sin pedir ayuda	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Soy capaz y quiero conocer las partes y funciones del cuerpo humano, por ejemplo, los aparatos y sistemas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Soy capaz y quiero organizar los deberes de clase para no dejarlos siempre a última hora	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Soy capaz y quiero respetar la opinión de mis compañeros de clase aunque piensen diferente a mí	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Soy capaz y quiero leer y entender textos de clase sin equivocarme	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Soy capaz y quiero buscar información sobre las asignaturas de clase, por ejemplo, en enciclopedias o en internet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Soy capaz y quiero hacer cálculos en clase con números enteros y con decimales	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Soy capaz y quiero realizar pequeños experimentos en clase y sacar conclusiones	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Soy capaz y quiero representar una obra de teatro o un baile con mis compañeros de clase	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Soy capaz y quiero entender los planos y mapas que trabajamos en clase	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Soy capaz y quiero comunicarme en otro idioma (leer, escuchar, escribir y decir frases sencillas) con mis compañeros de clase	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Soy capaz y quiero reconocer diferentes líneas (rectas y curvas), figuras geométricas y ángulos en las actividades de clase	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Soy capaz y quiero practicar en clase juegos tradicionales de mi país y de otros países	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Soy capaz y quiero utilizar adecuadamente las unidades del litro, metro y gramo en las actividades de clase	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Soy capaz y quiero expresar qué pienso cuando hablo con mis amigos de clase	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Soy capaz y quiero expresarme con el cuerpo, con música o mediante dibujos en clase	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Soy capaz y quiero opinar sobre una historia y explicar una actividad de clase a algún compañero	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Soy capaz y quiero hacer problemas utilizando sumas, restas, multiplicaciones y divisiones en las actividades de clase	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Soy capaz y quiero explicar a mis compañeros cómo he hecho las actividades de clase	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Soy capaz y quiero aprender de mis errores en las actividades de clase para corregirlos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. Soy capaz y quiero llegar a acuerdos con mis compañeros de clase, aunque piensen diferente a mí	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. Soy capaz y quiero pedir perdón cuando ofendo a algún compañero de clase y darle las gracias cuando me ayuda	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. Soy capaz y quiero seleccionar lo importante de la información que he encontrado en libros o internet para las actividades de clase	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. Soy capaz y quiero hacer un resumen de las noticias de internet que leemos en clase	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Soy capaz y quiero descargarme información de internet que me interesa para realizar las actividades de clase	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. Soy capaz y quiero esforzarme para conseguir aprender las actividades de clase	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. Soy capaz y quiero estar concentrado para aprender lo más importante de las actividades de clase	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Certificado: 900000 © 2014 dara - <http://mezclardara.com>

¡¡Muchas gracias por tu colaboración!!