



The European Conference on Educational Research in Helsinki, Finland 23-27 August 2010

COMPES Development of an Instrument for Basic-Competencies Assessment of Students in Higher Education.

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EVALFOR research group

1. INTRODUCTION

European Universities, through the European Higher Education Area want to promote the development of transferable and adaptable competencies for lifelong learning

From an assessment viewpoint, the learning-oriented asessment is a way to develop competencies through:

- 1. Authentic tasks
- 2. Students involvement in assesment
- 3. Providing feedforward

On the other hand, the digital era has expanded to all de profesional fields. In the university assessment we can talk about e-Assessment: "The end-to-end electronic asessment processess where ICT is used for the presentation of assessment activities and the recording of responses" (JISC, 2007:6)







COMPES: Development of an Instrumen for Basic-Competencies Assessment of Students in Higher Education

1. INTRODUCTION



1. INTRODUCTION

The main objective of **Recipiúa** is to test empirically (pre-test / post-test with quasi-control groups) the results obtained with the incorporation of the "*e*-Learning oriented *e*-Assessment" in:

a) The development of university teachers' competencies

b) The development of basic competencies regarding assessment in university student

The development of university teachers' competencies

The development of basic competencies regarding assessment in university student





COMPES: Development of an Instrumen for Basic-Competencies Assessment of Students in Higher Education

1. INTRODUCTION



"Self-report about the Development of Basic Competencies in University Students"

Instrument for the evaluation of students' perceptions about their own competencies before and after participating in an *e*-Learning oriented *e*-Assessment

In this paper COMPES design and validation process is described as a tool for students' reflection and self-assessment, as instrument of assessing teacher and also as an instrument for pre-test, post-test data gathering.





2. METHODOLOGY

A. Panel of Judges Validation

A1. Identification of the basic competencies in assessment.

The initial proposal is based in the Dublin descriptors.

A2. Definition of basic competencies.

With an on-line questionnaire the clarity, validity, relevance, usability and connection with assessment are evaluated. 36 researchers participated.

A3. Description of performances related to the competencies.

Each competence is divided in performances. Through an on-line questionnaire the coherence with the definition is evaluated. 50 researchers participated.

A4. Creation of COMPES Matrix.

Competencies, definitions and performances are described. A frequency scale with four levels is attached to each performance.

A5. Creation of COMPES Self-report.

The performances are written as affirmative sentences randomly organized. Each affirmation has a 1 to 6 rating scale.





2. METHODOLOGY

B. Empirical Validation

B1. Pilot study of COMPES Self-report.

55 students participated.

B2. Revision and conclusions of the pilot.

In a meeting, the results obtained are analyzed and COMPES is modified.





3. RESULTS AND CONCLUSIONS

After the validation process, 10 basic competencies are identified, 7 of them with 4 performances and 3 competencies with 3 performances. The level of each competence is defined as the frequency in which students use these performances.

The 10 basic competencies are:

Knowledge application.
Argumentation
Problem solving
Information analysis
Communication
Autonomous learning
Ethic sense
Creativity
Work in groups
Assessment/Evaluation



In COMPES self-report performances are written as affirmative sentences. At the moment, a test with 250 students is being made at the University of Cádiz to guarantee its fiability before being used for thousands of students in the nine Spanish universities participating in Re-Evalúa project.







3. RESULTS AND CONCLUSIONS

COMPES Self-Report															
1	Nunca 2 Pocas 3 Algunas 4 Bastantes 5 Mucha veces 2 veces 4	25 5	6	S	iem	ipre		1	Nunca 2 Pocas 3 Algunas 4 Bastantes 5 Mucha veces 4 veces 5	15	6	3	Siem	pre	
1	Cuando trabajo en equipo, participo y colaboro activamente	1	2	3	4	5	6	29	9 Suelo analizar críticamente las opciones disponibles para resolver un problema y sus consecuencias	1	2	3	4	5	6
2	Identifico mis propias necesidades formativas	1	2	3	4	5	6	3(Adapto mi formación analizando anteriores experiencias de	1	2	3	4	5	6
3	Cuando me enfrento a una tarea o actividad, reconozco y selecciono los conocimientos necesarios para desarrollarlas	1	2	3	4	5	6	\vdash	Mejoro mi conocimiento cuando aporto respuestas				┥	+	-
4	Conozco y comprendo cuáles son los principios y normas éticas de mi profesión	1	2	3	4	5	6	31	originales a situaciones y tareas académicas y/o profesionales			3	4	5	6
5	Cuando transmito información, opiniones o emociones por escrito, lo hago de forma clara	1	2	3	4	5	6	32	La información que tengo disp <mark>onible, la</mark> organizo y establezco relaciones significa <mark>tivas entre la</mark> s ideas			3	4	5	6
6	Elaboro argumentos y opinio <mark>nes de forma clara</mark> y coherente	1	2	3	4	5	6	33	Cuando transmito información, opiniones o emociones oralmente, lo hago de forma clara		2	3	4	5	6
7	Al abordar un problema, identifico <mark>y cl</mark> asifico <mark>los</mark> elementos que lo constituyen	1	2	3	4	5	6	34	4 Oriento mi comportamiento y el de los demás de acuerdo a los principios y normas éticas de mi profesión	1	2	3	4	5	6
8	Analizo y valoro mi trabajo <mark>mediante criterios cla</mark> ros y precisos	1	2	3	4	5	6	3	5 Cuando defiendo mis argumentos, interacciono con los interlocutores y debato sus ideas	1	2	3	4	5	6
9	Localizo, selecciono y reviso la información que necesito	1	2	3	4	5	6	30	6 Resuelvo de forma satisfactoria los problemas que se me plantean	1	2	3	4	5	6
10	Cuando afronto las actividades, lo hago de forma abierta, teniendo en cuenta diferentes perspectivas y formas de hacer	1	2	3	4	5	6	3	7 7 7 7 7 7 7 7 7 7 7 7 7 7	1	2	3	4	5	6





3. RESULTS AND CONCLUSIONS

COMPES Matrix

2. Argumentación											
Definición	Actuaciones	Nivel 1	Nivel 2	Nivel 3	Nivel 4						
Elaborar, exponer y defender	a) Elaborar argumentos y opiniones de	0%-25%	26%-50%	51%-75%	76%-100%						
argumentos, opiniones o	forma clara y coherente	Poco frecuente	Algo frecuente	Bastante frecuente	Muy frecuente						
teorías de forma clara y	b) Exponer y defender argumentos de	0%-25%	26%-50%	51%-75%	76%-100%						
coherente con el fin de	forma convincente y constructiva	Poco frecuente	Algo frecuente	Bastante frecuente	Muy frecuente						
transmitir juicios razonados,	c) Sustentar teorías y opiniones en	0%-25%	26%-50%	51%-75%	76%-100%						
convincentes y constructivos.	juicios razonados	Poco frecuente	Algo frecuente	Bastante frecuente	Muy frecuente						
	d) Defender argumentos	0%-25%	26%-50%	51%-75%	76%-100%						
	interaccionando con el interlocutor y	Poco frecuente	Algo frecuente	Bastante frecuente	Muy frecuente						
	debatiendo sus ideas										
NIVEL GLOBAL		Poco	Algo	Bastante	Muy						
		desarrollada	desarrollada	desarrollada	Desarrollada						





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THANK YOU VERY MUCH!

