

# Students' perspectives on assessment tasks in Higher Education

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**ABSTRACT:** When considering the concept of assessment as learning and empowerment three major challenges need to be addressed: student participation, feedforward and high quality assessment tasks. This paper presents the results of a study focused on high quality learning and assessment tasks in the context of Higher Education.

In accordance with the assessment quality framework developed by Gore, Ladwig, Elsworth & Ellis (2009) and the critical elements proposed by Ashford-Rowe, Herrington, & Brown (2014), learning and assessment tasks were developed which required students to engage with a range of challenges and demonstrate both skills and intellectual rigor. After each of these tasks were undertaken, students' opinions were obtained through the completion of a specifically designed online questionnaire called ATAE (Analysis of Learning and Assessment Tasks). This instrument is structured in three parts: 1. categorization questions, 2. closed questions on various aspects and possible strategies for the completion of the tasks in which the students' opinions are sought on their ease of implementation and how valuable they might be for application in other contexts and 3. open questions aimed at reflecting on the quality of the tasks.

This paper presents the main results obtained from identifying undergraduate students' perceptions on the assessment tasks they undertook, on the way each task was carried out or implemented, their usefulness in other contexts (in university and professional contexts) and the intellectual rigor they demanded.

The results show that assessment tasks whose design is based on authenticity and learning are valued very highly by students and represent valuable learning activities.

## 1 INTRODUCTION

The design of assessment processes is one of the essential functions of university lecturers (Bearman et al., 2016). If their design is to be based on the concept of assessment as learning and empowerment (Rodríguez-Gómez & Ibarra-Sáiz, 2015) they will need to address three essential challenges: student participation, feedback and quality assessment tasks. In this study, we focus primarily on the challenges of designing quality assessment tasks, but with the intention of analyzing and understanding the students' perspectives and ascertaining how they value the nature of the assessment tasks they undertake in the course of their academic studies.

The characteristics that a quality assessment task must demonstrate have been highlighted by authors such as Gore, Ladwig, Elsworth, & Ellis (2009) or Ashford-Rowe, Herrington, & Brown (2014). Based on these contributions, we will focus on two essential characteristics: the depth and the transferability of quality assessment tasks. By the depth of the assessment task we mean the features that makes it meaningful, not at all superficial and, consequently, that require students to demonstrate a profound and coherent knowledge of the contents of the discipline, the application of the fundamental processes and procedures of that discipline, as well as the implementation of high level analytical and reflexive thinking and, finally, the identification and proposal of valid solutions. With respect to the second characteristic, we consider that a high-quality task can be characterized by its applicability to a range of contexts rather than being specific to one context. As a result, it will require students to employ prior knowledge and integrate new knowledge, using an interdisciplinary approach, being able to apply their knowledge to other areas that, in addition, are aligned with the wider social and cultural context.

It is not uncommon to hear comments from the students that are less than positive about the timeliness, usefulness or fairness of assessments, but is this the case when high quality assessment tasks are used? How do students rate assessment tasks that are aimed at enhancing learning? These are the initial

questions that have provided the focus for this study and that have been refined and transformed into the following specific research questions:

- Do university students perceive depth in their assessment tasks?
- How do university students rate the transferability of assessment tasks?

## 2 METHOD

A set of learning and assignment tasks was designed based on the concept of delivering quality assessment tasks for use within the Project Management module, delivered at the Faculty of Economics and Business Sciences at the University of Cádiz (Spain) during the first semester of the 2016/17 academic year. In order to identify how students rated these assessment tasks, a voluntary questionnaire was applied to the students who took the module. Four assessment tasks were created and, once completed, the students rated each of them separately. In brief, Table 1 presents a basic description of each of the four assessment tasks. Guidelines were developed for carrying out each task, specifying: the desired learning outcomes, the competences covered, the learning products and activities/assessment tools incorporated, the learning methodology adopted, the resources and time allocation available, the assessment criteria and instruments used, the assessment methods and grading scheme applied and the weighting of each task.

Task 1-Design and completion of a comparative report on documents relating to Business and Economics
<p><i>Learning outcomes:</i></p> <ul style="list-style-type: none"> <li>• Complete in groups a comparative report on different types of document (plans, projects, statements and reports) within the field of business and economics.</li> <li>• Present orally the group report to the whole class, with the participation of all group members.</li> </ul> <p><i>Nature and duration of the task:</i></p> <ul style="list-style-type: none"> <li>- Group task in small groups of 3-4 students.</li> <li>- Duration: 4 weeks.</li> </ul> <p><i>Feedforward:</i></p> <ul style="list-style-type: none"> <li>- Assessment instrument available to all students from the beginning of the task.</li> <li>- Continuous supervision and monitoring by lecturers.</li> <li>- Clarifications and resolution of queries to whole group.</li> </ul> <p><i>Assessment:</i></p> <ul style="list-style-type: none"> <li>- Assessment method: <ul style="list-style-type: none"> <li>▪ Comparative report.</li> <li>▪ Oral presentation.</li> </ul> </li> <li>- Participation in assessment: <ul style="list-style-type: none"> <li>▪ Assessment modes: <ul style="list-style-type: none"> <li>- Self-assessment, peer assessment and assessment by lecturer.</li> </ul> </li> </ul> </li> <li>- Assessment instrument: <ul style="list-style-type: none"> <li>▪ RU_ICDP_Rubric for comparative reports on professional documents.</li> </ul> </li> </ul> <p><i>Grading:</i></p> <ul style="list-style-type: none"> <li>- All 3 assessment modes contribute to the grading.</li> <li>- Student and lecturer agree the final task grade.</li> <li>- Weighting of this element to the whole module: 15%</li> </ul>
Task 2-Oral presentation on predictive and agile methodologies for Project Management
<p><i>Learning outcomes:</i></p> <ul style="list-style-type: none"> <li>• Produce a group presentation on the nature of predictive and agile methodologies for Project Management.</li> <li>• Present the results orally to the whole class with the participation of all group members.</li> </ul> <p><i>Nature and duration of the task:</i></p> <ul style="list-style-type: none"> <li>- Group task in small groups of 3-4 students.</li> <li>- Duration: 4 weeks.</li> </ul> <p><i>Feedforward:</i></p> <ul style="list-style-type: none"> <li>- Assessment instrument available to all students from the beginning of the task.</li> <li>- Continuous supervision and monitoring by lecturers.</li> <li>- Clarifications and resolution of queries to whole group.</li> </ul> <p><i>Assessment:</i></p> <ul style="list-style-type: none"> <li>- Assessment methods: <ul style="list-style-type: none"> <li>▪ Oral presentation (resources chosen by the groups).</li> <li>▪ Choice of document presentation method (resources, handouts, report, etc.).</li> </ul> </li> </ul>

- Participation in assessment:
  - Assessment criteria: Proposed by the groups-class and agreed between students and lecturer.
  - Assessment modes:
    - Self-assessment, peer assessment and assessment by lecturer.
- Assessment instrument:
  - EV\_POM\_Rating scale for oral presentations on methodologies.

*Grading:*

- All 3 assessment modes contribute to the grading.
- Student and lecturer agree the final task grade.
- Weighting of this element to the whole module: 20%

**Task 3-Design and planning of a project in the area of Business and Economic Science**

*Learning outcomes:*

- Plan and produce individually a Project in the area of Business and Economic Science.
- Present in writing and graphically the Project design at an agreed date.

*Nature and duration of the task:*

- Individual task.
- Duration: 4 weeks.

*Feedforward:*

- Assessment instrument available to all students from the beginning of the task.
- Continuous supervision and monitoring by lecturers.
- Clarifications and resolution of queries to whole group.
- Opportunity to re-present if the minimum results are not achieved, through agreement in a personal tutorial.

*Assessment:*

- Assessment method:
  - Design and planning of a project.
- Participation in assessment:
  - Assessment modes:
    - Self-assessment, peer assessment and assessment by lecturer.
- Assessment instruments:
  - EV\_PE\_Rating scale for a comprehensive individual test of a global nature \_Student Form.
  - EV\_PE\_Rating scale for a comprehensive individual test of a global nature \_Lecturer Form

*Grading:*

- All 3 assessment modes contribute to the grading.
- Weighting of this element to the whole module: 25%

**Task 4- Comprehensive written individual test of a global nature**

*Learning outcomes:*

- Undertake an overarching comprehensive test consisting of resolving a case study in the context of Project Management, applying the competences covered in the module, using its content, applying the knowledge gained and in line with the requirements and guidance provided.

*Nature and duration of the task:*

- Individual task.
- Duration: 4 weeks.

*Feedforward:*

- Assessment instrument available to all students from the beginning of the task.
- Continuous supervision and monitoring by lecturers.
- Clarifications and resolution of queries to whole group.
- Opportunity for a group solution to another practical case study, voluntarily, prior to completion of the individual case study.
- Opportunity to re-present if the minimum results are not achieved, through agreement in a personal tutorial.

*Assessment:*

- Assessment method:
  - Individual written report on the solution to a practical case study.
- Participation in the assessment:
  - Assessment modes:
    - Self-assessment and assessment by the lecturer.
- Assessment instruments:
  - EV\_PE\_Rating scale for a comprehensive individual test of a global nature \_Student Form.
  - EV\_PE\_Rating scale for a comprehensive individual test of a global nature \_Lecturer Form.

*Grading:*

- All 3 assessment modes contribute to the grading.
  - Weighting of this element to the whole module: 25%
- (\*) The final grade for the module is achieved by adding the grades from Tasks 1-4 together with 15% for "attendance and participation in class" as determined by the lecturer.

Table 1. Description of assessment tasks

## 2.1 Participants

The results presented in this paper correspond to two groups of students who took the Project Management module as part of the Business Administration and Management degree and one group who took the module as part of their degree in Finance and Accounting. In total, the study involved 120 students. There were 47 in Group 1, 37 in Group 2 and 36 in Group 3. Between them these 120 students voluntarily provided a total of 359 scores, meaning they each completed an average of 2.99 assessment questionnaires throughout the year out of a maximum of 4. Table 2 shows the distribution of these questionnaires according to gender and group.

	f	%
Gender		
Male	180	50,14
Female	179	49,86
Group		
Group 1	124	34,54
Group 2	108	30,08
Group 3	127	35,38
Total	359	100

Table 2. Distribution of students' scores by gender and group

## 2.2 Questionnaire

A specific questionnaire denominated ATAE (Análisis de Tareas de Aprendizaje y Evaluación) - Analysis of Learning and Assessment Tasks - was designed for collecting students' scores. This instrument is structured in three parts: 1. questions for categorization, 2. closed questions (16) on various aspects and possible strategies for the completion of the tasks in which the students' opinions are sought on their ease of implementation and how valuable they might be for application in other contexts and 3. open questions, to elicit their reflections on the quality of the tasks.

The 16 items were presented in the format of a Likert scale, through which students could indicate their responses between a minimum score of 0 and a maximum score of 10.

In order to analyze the reliability of the questionnaire Cronbach's alpha was calculated, obtaining a result of 0.91 for the global scale of 16 items and a coefficient of 0.71 and 0.82 for the dimensions of depth and transferability respectively. We can therefore consider the instrument has a high degree of reliability.

## 2.3 Data analysis

The data from the questionnaire items with quantitative responses were first analyzed by means of an exploratory analysis using box and whisker graphs, the calculation of central tendency statistics (mean and standard deviation) and variance analysis (ANOVA) to analyze the statistical significance of possible differences in the opinions of the various groups. Open questions were analyzed using an ad hoc system of categories.

## 3 RESULTS

This paper presents only partial results obtained from the students' responses to eight of the sixteen items that constitute the complete questionnaire, and to the open questions. Specifically, the results are presented for those items that relate to the two key aspects for analysis: depth and transferability. Table 3 shows the content of each of the items included in both dimensions.

Dimension	Items	Description
Depth	I_01	Use of research methods
	I_06	Demonstration of thorough understanding of concepts and ideas

	I_11	Identification, articulation and incorporation of the concepts and topics fundamental to the module
	I_12	Development of reflective and critical thought
Transferability	I_09	Integration and incorporation of prior knowledge, skills and experiences with new knowledge, skills and experiences, establishing meaningful and relevant connections
	I_10	Establishment of relationships between prior and new knowledge, skills and experiences
	I_13	Relationship between the knowledge and experience and other subject areas
	I_14	Relationship between the knowledge and experience and social reality

Table 3. Description of items for the dimensions 'Depth' and 'Transferability'

The students were asked in the questionnaire to reflect on the assessment task they had carried out and to score it on a scale of 0 to 10 in terms of to what degree or extent the aspects described in each of the items had been put into practice or developed.

Firstly, we present the results for the overall scores for each of the separate assessment tasks. Subsequently, we present the results of comparing the scores of all the three participating groups.

### 3.1 Overall scores for the assessment tasks

Figure 1 shows the results relating to the set of items through which the student's scores relating to the depth and transferability of the four assessment tasks are collected. We can observe that overall the four assessment tasks were given a minimum average score of 6.73 and a maximum score of 8.12. Tasks 3 and 4 are scored more highly in all aspects of both dimensions (depth and transferability), while Tasks 1 and 2 receive lower scores for the aspects related to transferability.

The results of the analysis of variance (ANOVA) indicate that the differences between the scores obtained are statistically significant ( $p < .05$ ) in items 01, 09, 10, 13 and 14.

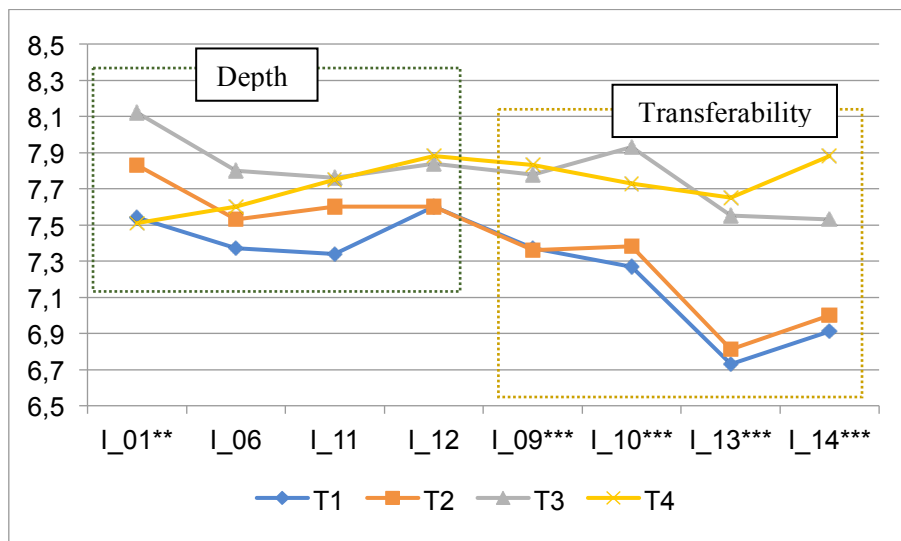


Figure 1. Average scores for the items relating to the dimensions of depth and transferability of the assessment tasks T1, T2, T3 and T4

### 3.2 Differences between the scores of the three groups

The results obtained for each of the tasks are presented below to indicate possible differences in scores given as a function of the group

With respect to Task 1 (Figure 2) the average scores for each of the items are presented. Some differences can be observed between the three groups, although the ANOVA results indicate that in no case are these differences statistically significant ( $p < .05$ ).

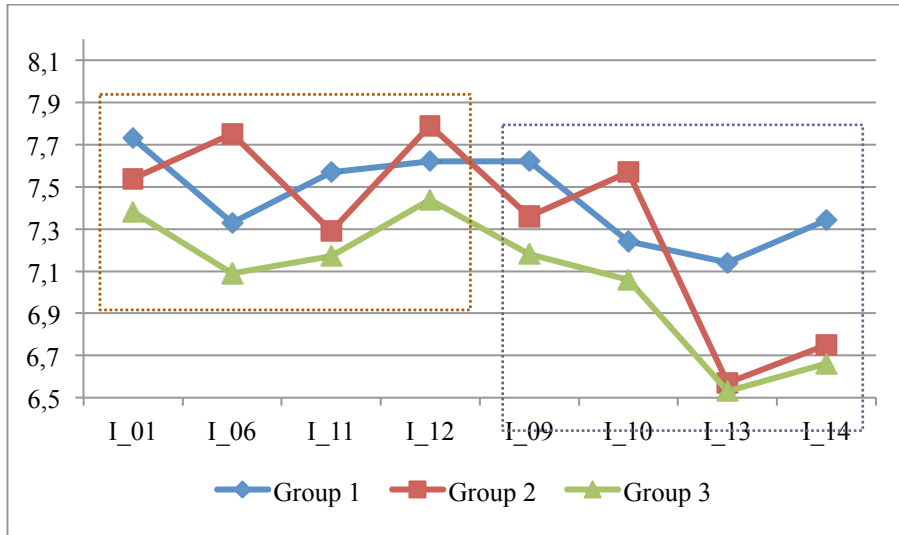


Figure 2. Scores for the aspects of depth and transferability for Task 1 in function of the group

With regard to Task 2 it can be seen from Figure 3 that there are also some differences in the scores of the three groups, although these are only statistically significant ( $p < .05$ ) for items 6 and 14.

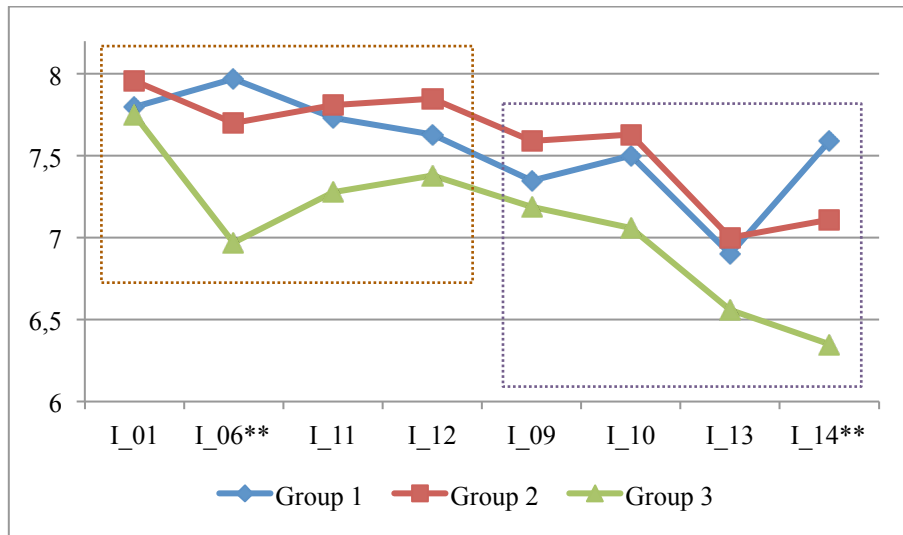


Figure 3. Scores for the aspects of depth and transferability for Task 2 in function of the group

With regards to Task 3 (Figure 4) significant differences in the scores of different groups is only seen for item 6.

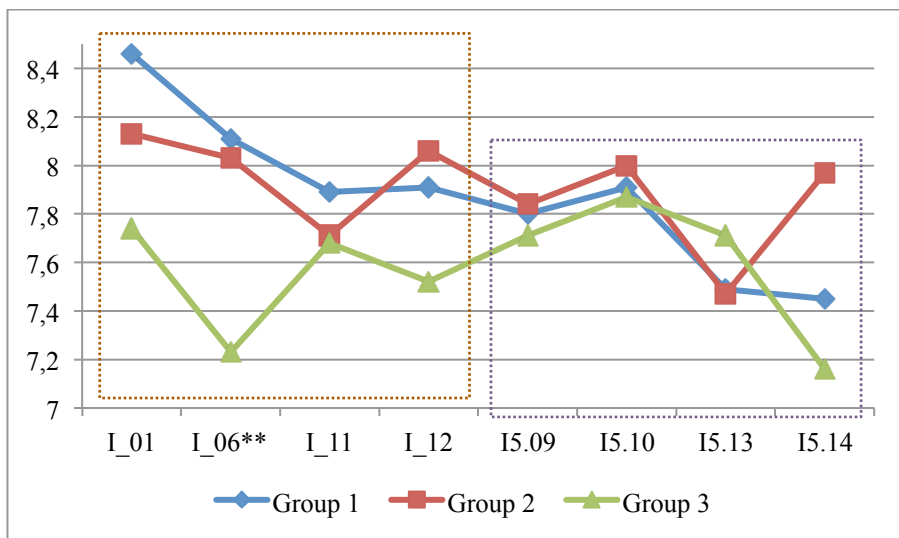


Figure 4. Scores for the aspects of depth and transferability for Task 3 as a function of the group

Finally, in Task 4 (Figure 5), although there are differences in mean scores among the three groups, only for item 11 is this difference statistically significant ( $p < .05$ ).

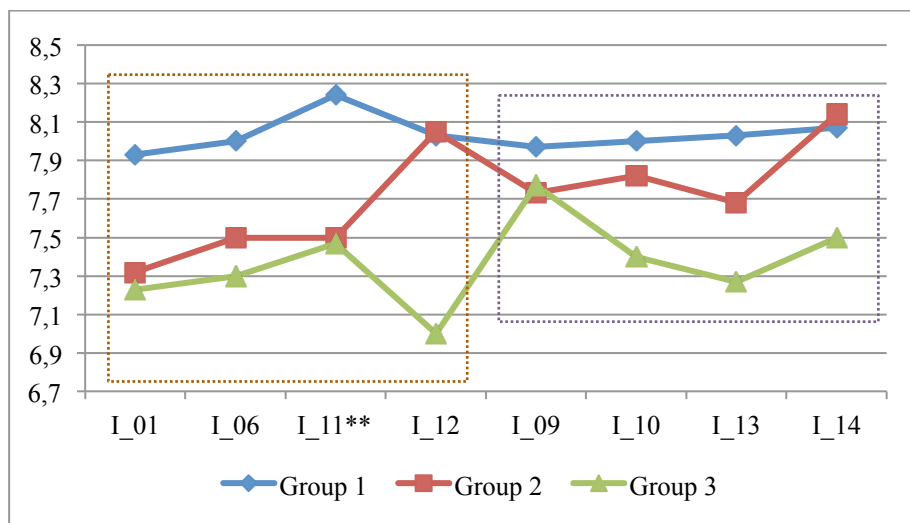


Figure 5. Scores for the aspects of the depth and transferability for Task 4 as a function of the group

#### 4 DISCUSSION AND CONCLUSIONS

From the results we have presented here it has been possible to show how the students have scored positively all four of the assessment tasks that they had to complete as part of their studies. The students have deemed that through these four tasks they have been able to apply or develop a thorough knowledge of the subject and, additionally, in the case of Tasks 3 and 4, they indicated a high degree of agreement that these tasks had significant potential for transferability to other contexts or situations.

The students' scores in relation to the degree of transferability of Tasks 1 and 2 indicate the consistency of their assessments, since they themselves were evaluation tasks with a low level of transference.

Although some differences between the assessments made by the different groups have been observed, these have only been found to be statistically significant in some specific items. However, it is worth noting the pattern of responses presented by Group 3, since for all four assessment tasks it usually presents lower average scores than groups 1 and 2.

In conclusion, we have been able to verify how assessment tasks that are designed based on their authenticity and learning value are rated positively by students, thus representing valuable activities to enhance their learning.

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