CONSTRUCTION OF A QUESTIONNAIRE TO KNOW THE TRANSPARENCY IN THE EVALUATION OF THE LEARNING OF ENGINEERING STUDENTS

Track 3. Educational Assessment & Evaluation in Digital Society

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1. Introduction

**METHODOLOGICAL PROPOSALS**

- INVOLVEMENT
- PARTICIPATION

**EVALUATION PROCESS**

- LEVELS OF PARTICIPATION

**SHARED EVALUATION**

- Evaluation Procedures

**FORMATIVE EVALUATION**

- Design Evaluation Tools
- Negotiating and agreeing

**TRAINING OF STUDENTS**
1. Introduction

Preconceptions

MAKE

EXPLICIT

Purposes

Intrests

Transparency

EVALUATION
PROCESS

Responsibility

Commitment

ENGINEERING

Reports, projects, developmental tests and oral exams

Portfolio, observations or scales of attitudes

Presence Utility

Experimentation/adaptation

Involve in the construction

Inform

Students

Evaluation Methods

Weight of Activities

Evaluation Criteria
2. Objectives

- Construct an questionnaire about the transparency of the evaluation methods.
- Conduct expert validation of the questionnaire.
- Conduct a pilot study with students of degrees of engineering applying the questionnaire.
- Analyze the reliability and validity and determined improvements.
3. Methods

Survey Methodology

Validation of the survey

Review

Sampling

66 items (7 Dimensions)

Scientific literature

Experts (n₁=5)

Pilot Study

Reability & Validity Study

Categorical analysis

Factorial analysis

Intentional

n₂ = 50
Engineering
4º grade
UMA

Database

TELCOM

Industrial

Likert scale
0 (totally disagree) to 5 (totally agree)

1) Transparency, involvement and accountability in evaluation.
2) Rating information level.
3) Characteristics of evaluation modalities.
4) Educator Feedback.
5) Educational resources and agents for acquiring learning.
6) Procedures, strategies and plans to guide the student’s integral learning.
7) Availability of material resources used by educators.
4. Results

Validation of the experts and literature review

Redefining and better specifying several items

Cronbach Alpha coefficient

Factorial analysis

Categorical analysis (CATPCA)

Pilot Study

Reliability Study

Internal Consistency

(\(\alpha = 0.923\))

19 Components. Explained Variance 85.29%

7 dimensions. Internal Consistency

(\(\alpha\) from .784 to .944).
4. Results

Survey Methodology

Validation of the survey

Review

Sampling

66 items (7 Dimensions)

Scientific literature

Experts ($n_1=5$)

Pilot Study

Reability & Validity Study

Categorical analysis

Factorial analysis

Pilot Study

Intentional

$n_2=50$

Engineering

$4^\circ$ grade

UMA

Database

TELCOM

Industrial

Likert scale

0 (totally disagree) to 5 (totally agree)

1) Transparency, involvement and accountability in evaluation.
2) Rating information level.
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5. Conclusions

Evaluate the transparency in the evaluation systems

Statistical support

Theoretical support

**QUESTIONNAIRE**

1) Literature review
2) Expert judgment
3) Pilot study

Cronbach Alpha coefficient

Successful analysis of the reliability

Factorial analysis vs Categorical analysis (CATPCA)

A model more parsimonious

**Literature review**

1) Transparency (Alvárez-Rojo et al. 2011).
5) Etc.
THANKS FOR YOUR ATTENTION

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