



## Psychometric support under Moodle

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### Abstract

Moodle (abbreviation for Modular Object-Oriented Dynamic Learning Environment) is a free and open-source e-learning software platform, also known as a Course Management System, Learning Management System, or Virtual Learning Environment (VLE). Moodle was developed to help educators create online courses with a focus on interaction and collaborative construction of content, and is in continual evolution.

Psychometrics is the field of study concerned with the theory and technique of educational and psychological measurement, which includes the measurement of knowledge, abilities, attitudes, and personality traits. The field is primarily concerned with the construction and validation of measurement instruments, such as questionnaires, tests, and personality assessments.

The main objective of the project is to aid educators in building questionnaires and tests. It is a way to measure the validity and the reliability of questionnaires and tests designed by educators. These measures allow improvements on future questionnaires and therefore improve the evaluation quality of the organization.

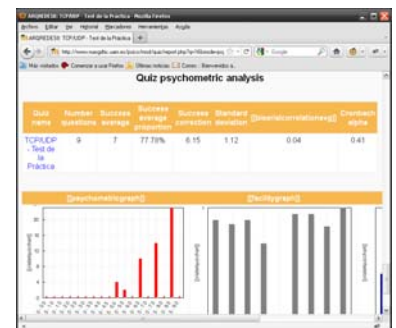
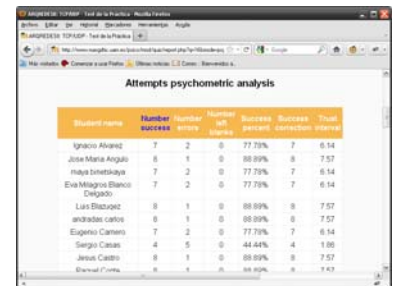
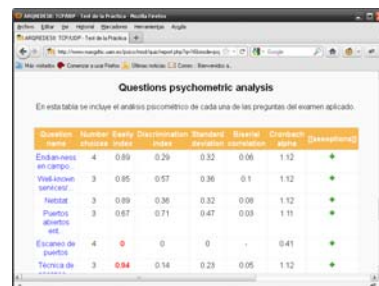
This project allows you to add extra modules to moodle. These plugins provide:

- Online help while designing questionnaires and tests.
- Different psychometric indicators when questionnaire/test results are obtained.
- Reports in natural language to aid educators to correct future tests.

Of course, this project is open source and free to the world.

Psychometry + Moodle =

- Accurate evaluation
- Easily understanding
- Instant reports
- Fast older exams comparison
- Invalid exams detection
- High-quality & independent evaluation method
- Objective
- Free



<http://code.google.com/p/moodle-psychometrics>

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### Conclusions

In general, psychometric testing can help students/teachers by:

- Providing an objective measure of often hidden abilities.
- Highlighting strengths and weaknesses
- Helping to identify interests
- Identifying skills
- Providing an insight into personality
- Providing insights into aspects of work
- Detect invalid items on questionnaires and exams
- Ensure a high-quality, non-discriminatory, independent, and objective evaluation method.

The use of psychometric testing within the Educational Plan is, when used correctly, wholly consistent with the aim of providing a high quality, non-discriminatory, independent, and objective evaluation tool.

The proposed tool of this work enables all psychometric features under a widely-used e-learning platform system: Moodle.