



## Using Blended Learning to Enhance Students' Learning Efficiency

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**Domain:** Student Engagement & Support

**Challenge Area:** Designing Engagement Pathways

**Status:** Established Best Practice (validated and replicable practices)

**Implementation Complexity:** Low

The blended learning approach combines different learning delivery modes, including face-to-face teaching, learning management system (LMS)-based learning (for example, Moodle), and web-based learning, for content delivery, communication, and assessment. This project focuses on two core modes: face-to-face learning and LMS-based learning.

While LMS platforms are effective tools for engaging students in active learning, they are often underutilised in lectures. The goal of this practice is to rethink teaching design in order to better exploit online learning tools and enhance active learning, engagement, and learning efficiency.

### Practical Implementation

For each topic, instructors provide students with three types of e-learning materials on an LMS such as Moodle or Blackboard:

1. Pre-class activities, such as videos or news articles introducing the topic and sparking interest;
2. Lecture materials, including slides and/or lecture recordings;
3. After-class activities, such as readings, links to external resources, and quizzes that provide immediate feedback.

Students are instructed to complete pre-class activities before lectures and after-class activities before the next topic begins. Online materials are explicitly integrated into face-to-face teaching to reinforce engagement, and in some cases completion of online components is graded to motivate participation.

This practice was first introduced in the undergraduate module Public Economics (400+ students), and later adopted in Economics of Regulation and Public Choice (400+ students), as well as the postgraduate module Business Economics (80+ students). To support wider adoption, the e-learning team developed ready-to-use Moodle templates that help academics structure modules using this blended format.

### Impact Indicator

Impact was measured using Moodle log data capturing student completion of online activities. Regression analysis showed that engagement with online learning activities is associated with higher final marks, with a particularly strong effect for completion of pre-class activities. Timely completion of activities demonstrated an even stronger positive relationship with academic performance.

### Enablers

- Learning management system (e.g., Moodle, Blackboard)
- Structured pre-class and after-class activities
- Online quizzes with immediate feedback
- Integration of digital content into face-to-face teaching
- Ready-to-use LMS templates developed by the e-learning team

A student survey was also conducted to capture perceptions of blended learning. Results indicate highly positive attitudes toward the approach, including perceived usefulness, increased self-efficacy, and strong intention to use e-learning materials in future study. Further analysis of the efficiency of this practice is discussed in the forthcoming paper “Mind the Gap: The Realities of Students’ Engagement with Online Learning Resources.” and is available at <https://doi.org/10.1177/14697874251385804>.