

Implementing Project Managers in the Software Engineering Classroom

Project management is a discipline that spans many industries and has undeniable benefits in its application. Sometimes, however, it can be difficult to convey its importance and application in the classroom environment. Many process and project management classes cover the core concepts, but fail to provide students with the opportunity to experience both the dynamics and leadership elements so core to project management as both a leader and a team member.

This article describes an innovative approach to using project managers (PMs) in the classroom that has had measured effects in several areas, including individual student participation, group project disposition, and in-class presentations. Results have been encouraging, with student feedback (from both PMs and group members) indicating positive effects on interest in the field and application of project management, improved group dynamics, and more individual participation in the outcome of group projects.

Specifically included in the article are examples of PM inclusion in both the class curriculum and main project from beginning to end and how they have been applied to a process and project management course in the past. Areas explored include the PM selection process, class attendance improvement via the PM-led group dynamic, PM-specific activities and evaluation, and the inclusion of a final presentation as a product in a normally process and project heavy course. For context, a description of the class curriculum, some related work, and relevant quantitative and qualitative student feedback are included as well.

The concepts and examples have been successfully implemented as part of a software engineering curriculum, but they could easily be applied to any classroom that wishes to expand project management instruction beyond a simple explanation of process and project management to an immersive experience with both practical and pedagogical benefits.