

Abstract Submitted
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**Student Autonomy and its Effects on Student Enjoyment in
a Traditional Mechanics Course for First-Year Engineering Students¹**

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College of Engineering — In light of recent literature in educational psychology, this
study investigates instructional support and students' autonomy at a small technical
undergraduate school. Grounded theory is used to analyze twelve semi-structured
open-ended interviews about engineering students' experiences in *Introductory Me-
chanics* that includes *Lecture*, *Recitation*, and *Laboratory* components. Using data
triangulation with each course component as a unit of analysis, this study examines
students' course enjoyment as a function of instructional support and autonomy.
The *Lecture* utilizes traditional instructor-centered pedagogy with predominantly
passive learning and no student autonomy. The *Recitation* creates an active learning
environment through small group work with a moderate degree of autonomy. The
Laboratory is designed around self-guided project-based activities with significant
autonomy. Despite these differences, all three course components provide similar
levels of instructional support. The data reveal that students enjoy the low auton-
omy provided by *Lecture and Recitations* while finding the *Laboratory* frustrating.
Analyses indicate that the differences in autonomy contribute to students' misin-
terpretation of the three course components' value within the context of the entire
course.

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