

Course Format Effects on Learning Outcomes in an Introductory Statistics Course

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Abstract

The purpose of this study was to determine if course format significantly impacted student learning and course completion rates in an introductory statistics course taught at Harford Community College. In addition to the traditional lecture format, the College offers an online, and a hybrid (blend of traditional and online) version of this class. The instructor and course materials, including the text, homework, and examinations, were the same for the formats compared in this study. Student learning outcomes, as measured by examination scores, were the same, regardless of format. The course completion rate was numerically lower for online than for traditional and hybrid formats. Since inclusion of lecture in both the traditional or hybrid course format did not improve student learning, it was concluded that student learning from face-to-face lectures was not as important as their learning through readings, practicing, and applying skills.