

THE ANALYSIS OF TEACHING AN ONLINE STUDENT-CENTERED CLASSROOM WITH MASTERY LEARNING TO HIGH SCHOOL BIOLOGY STUDENTS

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Introduction and Background

- Metea Valley High School is located Aurora Illinois.
- 9th Grade Honors Biology students were taken through a semester of their course with a mastery learning method.
- Students will then be able to repeat activities until they show a mastery level of 85% or higher on the activity.

Analysis

- Student perceptions favored mastery learning.
- Student Achievement displayed expected grade distributions
- Analysis was done via Likert Surveys, Grade Point Averages, Student Interviews, Standardized Assessment Growth and Parent Perceptions

Value

- Insight into the effectiveness of mastery learning
- Better understanding of student's perceptions of working at their own pace and online learning
- Consideration of implementing mastery into a typical high school environment

Student Quotes

- “Mastery learning allows more freedom, more independence....and it is really easily accessible.”
- “I absolutely prefer in-person learning compared to online, I stay more connected, and I miss the social interactions”.
- “I like working at my own pace, it puts responsibility on me for completing assignments and getting things done on time”.

Results

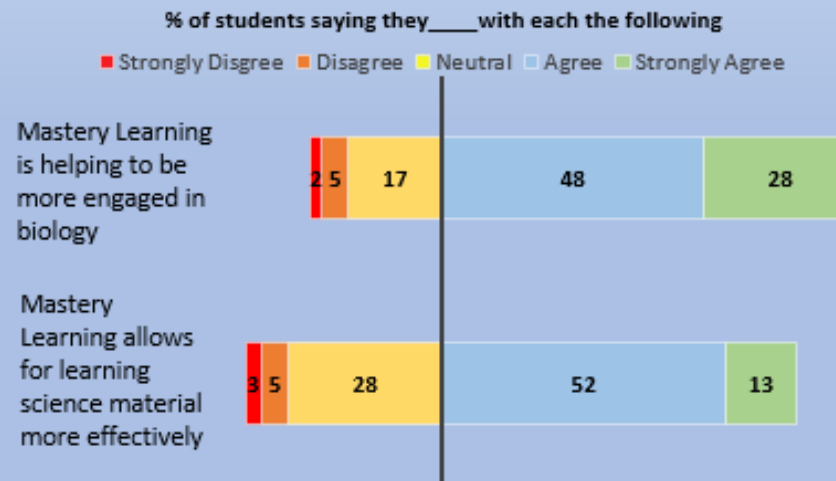


Figure 1. Likert Survey Results for Student Perceptions of Mastery Learning, (N=88).

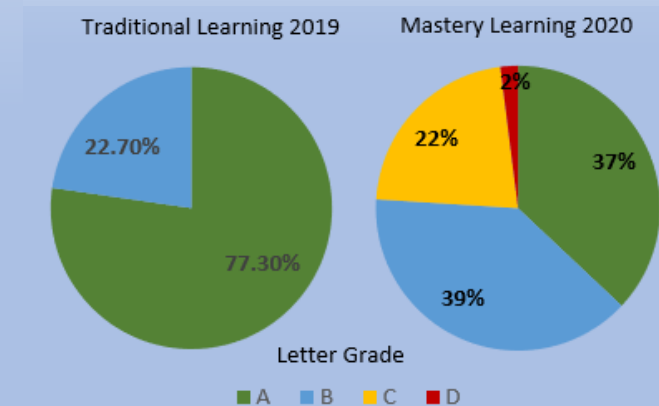


Figure 2. Class percentage grade comparison from mastery to traditional learning environments, (N=88).