Student-Reported Impact of Multidisciplinary Learning and Team Teaching (MLTT) Courses

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About MLTT

Interdisciplinary teaching has become a central part of curricular reform at institutions across the country. In Fall 2005, U-M President Mary Sue Coleman dedicated $2.5 million dollars to support team teaching efforts and interdisciplinary degree programs at the undergraduate level. The MLTT Initiative Steering Committee called for proposals and allocated start-up funds for outstanding new courses and programs that would target first- and second-year students and be models for others.

In August 2009, the Center for Research on Learning and Teaching (CRLT) conducted a survey of students who had enrolled in MLTT courses over the previous two years in order to assess the impact of these classes. Courses involved in the study include

- PUBPOL 201: Problems of the Day
- SEAS 215: Social Issues in SE Asia
- CSCS 281: Applied Complex Systems

About the Survey

Invitations to participate in the online survey were sent to 271 students and 60 alumni, for a total of 331 individuals. Overall, 229 participated (RR=69%). The response rates were similar for current students (70%) and recent graduates (65%).

Overall Survey Results

For the vast majority of respondents (74%), the MLTT course was their only experience with team teaching at the University of Michigan. Students’ response to the course was overwhelmingly positive. 93% of those surveyed would have liked more courses like this.

Skill Development, Compared to Other Courses

Over half of students in each class reported developing the following skills more or much more in their MLTT courses than in other courses.

Critical, Analytical, and Problem-Solving Skills:
- Drawing on multiple perspectives in addressing problems or issues: More or Much More
- Making connections between major concepts from different fields of study: 86%
- Considering a broader context when decision-making and problem-solving: 86%
- Identifying the components of a problem or issue: 76%
- Formulating good questions: 72%

Reading and Written Communication Skills:
- Being able to read sources from multiple disciplines: 63%

Thinking Creatively:
- Analyzing problems in a way that considers unusual alternatives: 78%
- Willing to change your mind: 68%
- Being open to others’ points of view: 61%

Application of Skills in Other Contexts

Have you been able to apply the following skills in other contexts?
- Drawing on multiple perspectives: Yes 96%
- Being open to others’ points of view: 91%
- Choosing the appropriate method (or mixture of methods) to solve a problem: 84%
- Participating effectively in group discussion: 84%
- Relating effectively to people with backgrounds different from yours: 84%
- Being able to receive feedback and criticism: 83%
- Writing persuasively: 81%
- Being able to integrate diverse materials in writing: 81%

Student Comments

“[I] will carry with me the unique learning experience the class provided. The method of having different professors team teach different areas kept me engaged and interested throughout the entire semester. I would love to see the University provide more classes of this type.”

“A comprehensive and integrating course curriculum that very explicitly binds major ideas from starkly different fields of study and does so very well.”

“There were many components of the class that I have been able to apply in other classes. The most helpful have been the analytical skills and approaches and the ability to be more open-minded and [capable] of combining knowledge from several fields.”

“I find the focus of this class (solving complicated problems) to be of incredible value to me. Finance (my major) revolves tremendously around solving large complicated problems and interactions.”

“The main benefit to this class was having the many different lecturers. Each one was very different and often discussed different viewpoints on many issues. It made me realize how communication is necessary to understand situations.”

Conclusions

Students’ survey responses indicate that the MLTT courses do promote the aims they are intended to achieve, such as teaching students to draw on multiple perspectives to address an issue and to read sources from multiple disciplines. Surveys also showed that students have confidence in their ability to apply the skills learned in the MLTT courses in a variety of contexts, including other undergraduate courses, employment, graduate school, personal life, and civic life.