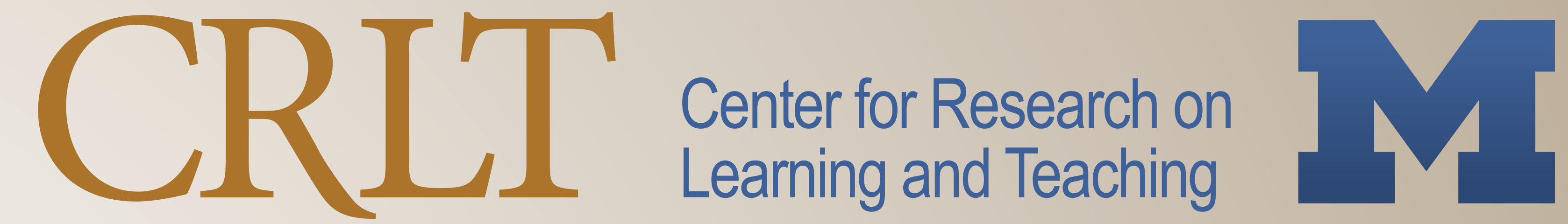


# Impact of Multidisciplinary Learning and Team Teaching (MLTT) Courses



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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 dedicated \$2.5 million dollars to support team teaching efforts and interdisciplinary degree programs at the undergraduate level, including Multidisciplinary Learning and Team Teaching (MLTT) courses.

In the summers of 2009 and 2010, the Center for Research on Learning and Teaching (CRLT) conducted a survey of students who had enrolled in MLTT courses over the previous three years to assess the impact of these courses.

### Courses in the Study\*

- PUBPOL 201: Problems of the Day\*\*
- SEAS 215: Contemporary Social Issues in Southeast Asia\*\*
- UARTS 250: Creative Process\*\*
- GEOSCI 334: Sustainable and Fossil Energy: Options and Consequences
- CMPLXSYS 281/POLSCI 281: Applied Complex Systems: Emergent Challenges\*\*
- WOMENSTUD 432: Gender and Health Policy\*\*
- MATSCI 493/ARCH 409/ARTDES 300: SmartSurfaces
- INFO 410: Ethics and Information Technology
- SW 305: Theories and Practices for Community Action and Social Change

\*One MLTT course, The Global HIV/AIDS Epidemic, offered for the first time after the survey, is not included. \*\*Students in two course iterations were surveyed.

### About the Survey

Of 634 students contacted, 417 participated in the survey (response rate=66%). For individual courses, the response rate ranged from 51% to 78%.

Student diversity in the MLTT courses surveyed, taken together, paralleled U-M students as a whole in terms of gender, ethnic or racial identity, and GPA.

## Learning Outcomes

### Skill Development, Compared to Other Courses

High percentages of students reported learning skills in MLTT courses more than they had in other courses. The following list shows skills for which more than half of the students said this was true for them.

#### Critical, Analytical, and Problem-Solving Skills:

Considering a broader context when decision-making and problem solving .....	84%
Drawing on multiple perspectives in addressing problems or issue.....	82%
Making connections between major concepts from different fields of study.....	82%
Formulating good questions .....	70%
Identifying the components of a problem or issue .....	70%
Investigating complex systems .....	68%

#### Oral Communication and Collaboration Skills

Identifying multiple perspectives when listening or working with a group .....	63%
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#### Reading and Written Communication Skills:

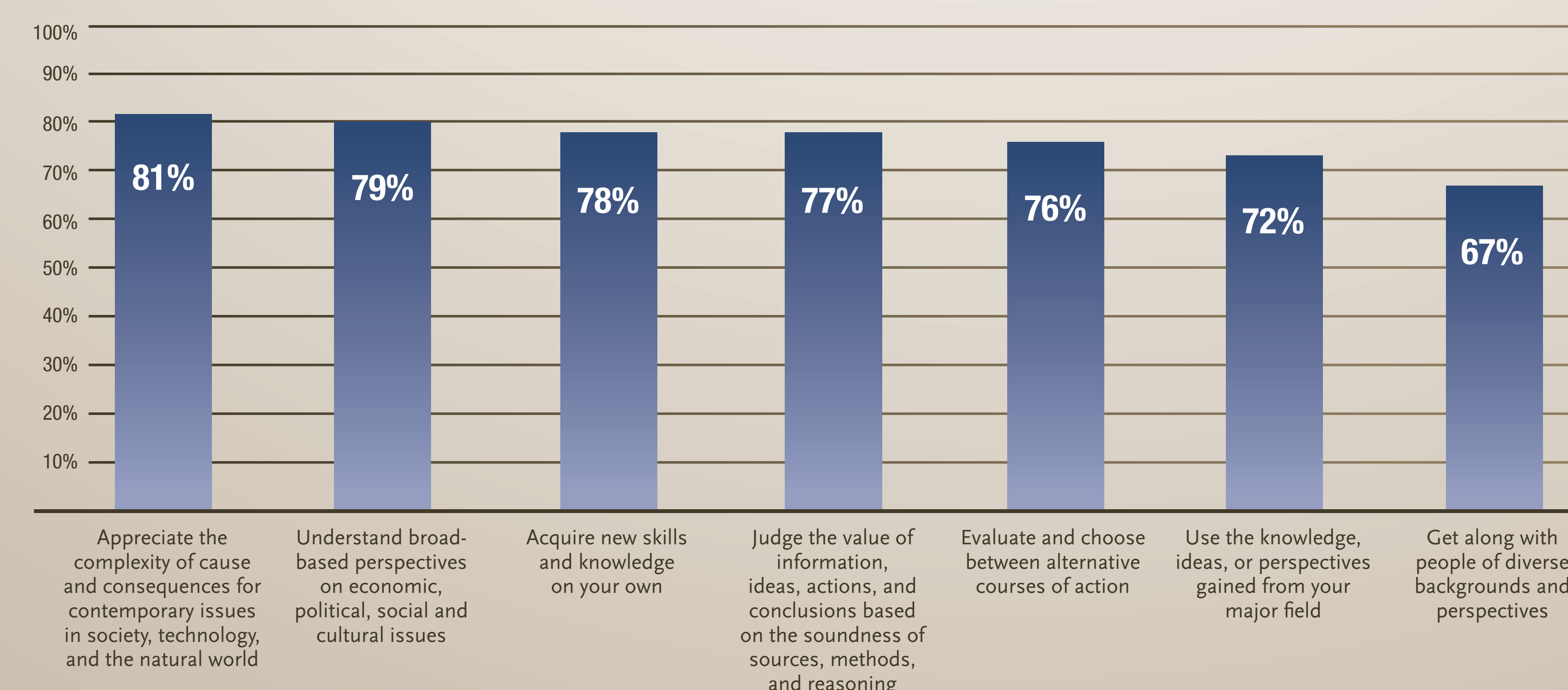
Being able to read sources from multiple disciplines .....	56%
Being able to integrate diverse material in writing .....	54%

#### Thinking Creatively:

Analyzing problems in a way that considers unusual alternatives .....	71%
Willing to change your mind.....	71%
Being open to others' points of view.....	71%

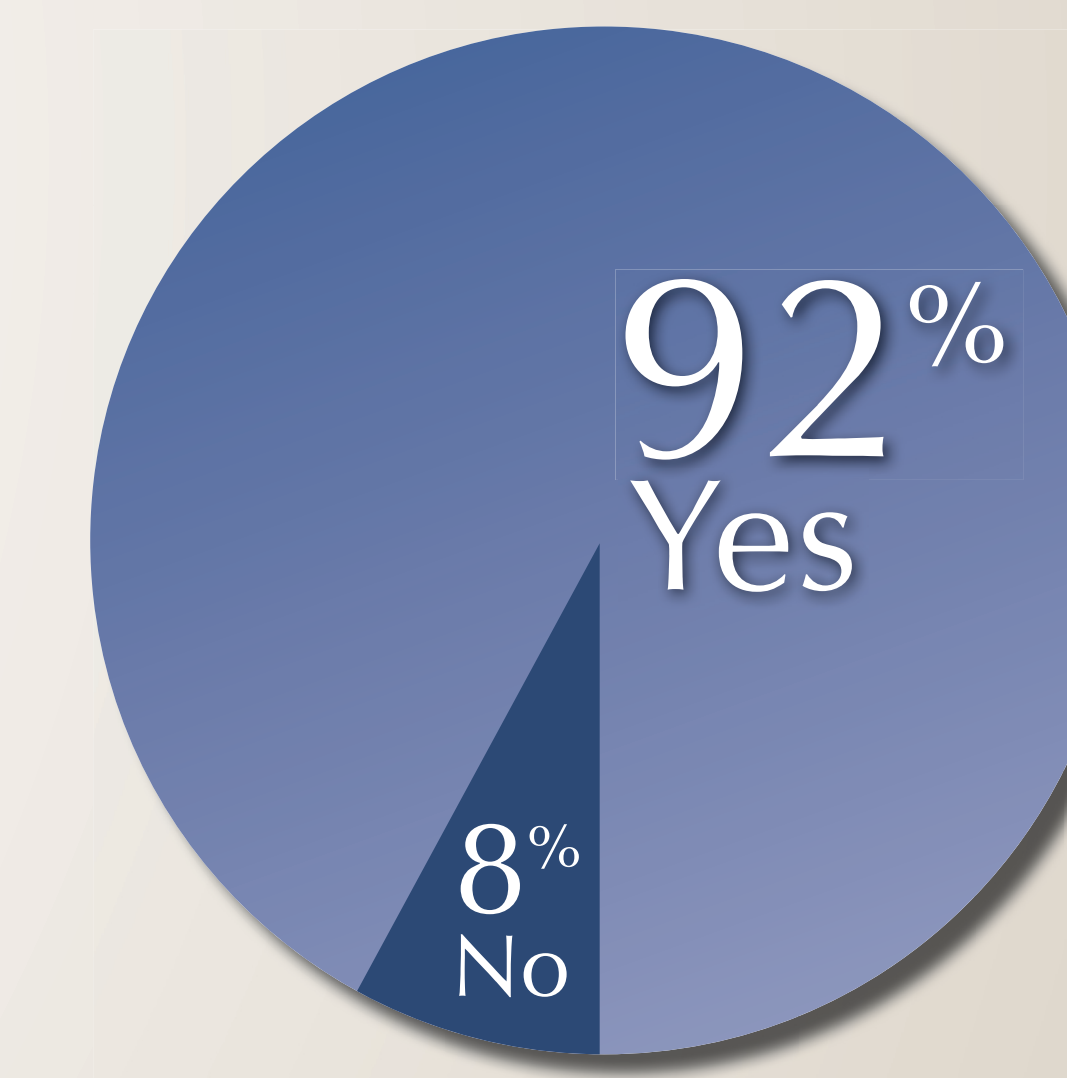
### Preparation for the Future

Percentage of students who said the MLTT course prepared them well or very well to:



## Student Comments

Student responses to MLTT courses were overwhelmingly positive. 92% of those surveyed would have liked more courses like this.



Sample student comments further reflect the aims of the MLTT initiative:

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

"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."

"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."

"There was a social-emotional aspect to this course....A lot can be said for making small communities where different people share their perspectives on creativity and design but also on life perspective and experience."

## Conclusions

The data from student surveys indicate the MLTT courses are highly successful in promoting their intended aims, including:

- Preparing students to address issues in the changing future.
- Developing skills needed for complex problem-solving.
- Developing skills of integrative learning.
- Developing core skills.
- Increasing students' ability to transfer skills from MLTT courses to other contexts.