

# Bottom Up Faculty Development

Joel Vaughan, Brenda Gunderson, David Childers

Department of Statistics  
University of Michigan

MIC 2009

# What is Faculty Development?

## One Definition:

“Faculty development is defined as any activity that encourages faculty to acquire knowledge, skills, techniques, and attitudes to provide quality teaching and develop research/scholarly/creative activity and effective service at their institution. Development is viewed as a process that is systematic and carefully planned. The plan is to be tailored to the individual and the individuals contribution to the Department, the College, and the University.”

Source: Fort Hays State University Faculty Development Application Form

MERLOT's Faculty Development Collection is organized into the following categories:

- Accessibility
- Assessment and Evaluation
- Best Teaching Strategies
- Instructional Design
- Policies
- Scholarship of Teaching and Learning
- Selecting and Using Tools
- Support and Training

# MELO: Who We Are

MELO

= “Michigan Education through Learning Objects”

# MELO: Who We Are

## MELO

= “Michigan Education through Learning Objects”

## Purpose

To develop human infrastructure to collect and deploy online resources to enhance undergraduate and graduate education at the University of Michigan.

# MELO: Who We Are

## MELO

= “Michigan Education through Learning Objects”

## Purpose

To develop human infrastructure to collect and deploy online resources to enhance undergraduate and graduate education at the University of Michigan.

## Makeup:

### Participants Include:

- Faculty Mentors
- Graduate Student  
Instructors
- Instructional Technology  
Specialist

### From **diverse** departments:

- Chemistry
- Psychology
- Statistics

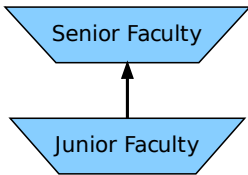
# Faculty Development and MELO

- “Faculty Development” was not a stated goal of the group.
- Nevertheless, we think the MELO framework provides natural way to develop *current* and *future* faculty.

# What We Do

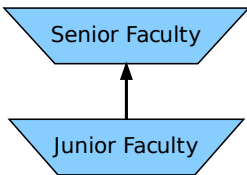
- Meet regularly.
- Engage in training activities.
- Present work, talk, and sometimes laugh.
- Scour MERLOT (and other sources) for excellent online learning objects.
- Design our own learning objects to meet felt needs.
- Determine creative ways to make excellent learning objects available to the UM community to enhance student learning.
- Faculty mentors guide and challenge graduate student instructors.

## Traditional:

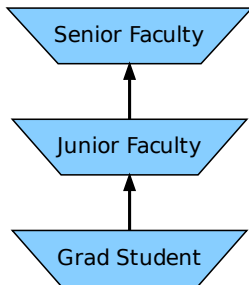


# Faculty Development Models

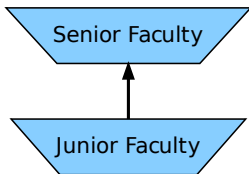
## Traditional:



## BUFD:



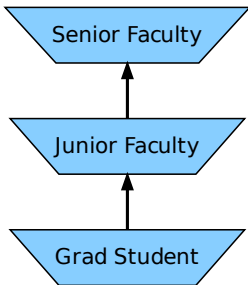
# Traditional Faculty Development



## Barriers Include:

- Time is *precious*.
  - Pressure to publish
  - Time spent teaching effectively
  - Time spent on service
- Teaching technologies change *very* quickly.

# Bottom Up Faculty Development

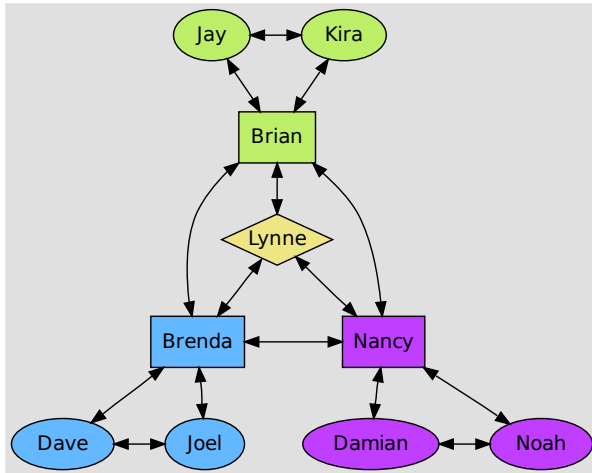


BUFD benefits include:

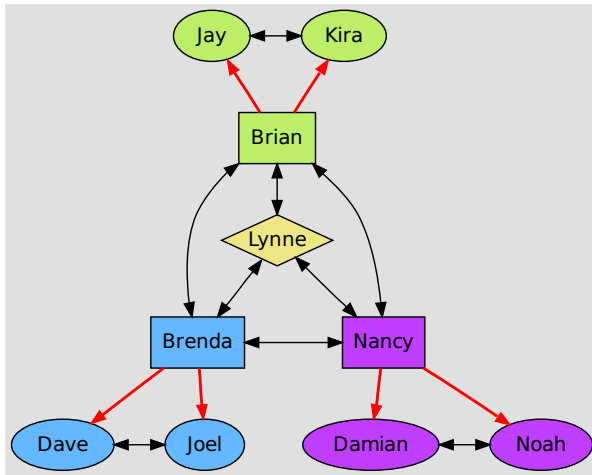
- Faculty Development begins earlier, while still in graduate school.
- Development is *experiential* and *meaningful* rather than another activity that requires time.

# MELO Connections

The connections established in MELO provide faculty development in many unexpected ways.



# Faculty Mentors → Graduate Students



## Experience

- Teaching (Instruction Design, Best Teaching Strategies)
- Publishing (Scholarship of Teaching)
- University policies

# Faculty Mentors → Graduate Students

## Experience

- Teaching (Instruction Design, Best Teaching Strategies)
- Publishing (Scholarship of Teaching)
- University policies

## Expertise

- Subject Area
- Technological (Selecting and Using Tools)
- Navigating politics

# Faculty Mentors → Graduate Students

## Experience

- Teaching (Instruction Design, Best Teaching Strategies)
- Publishing (Scholarship of Teaching)
- University policies

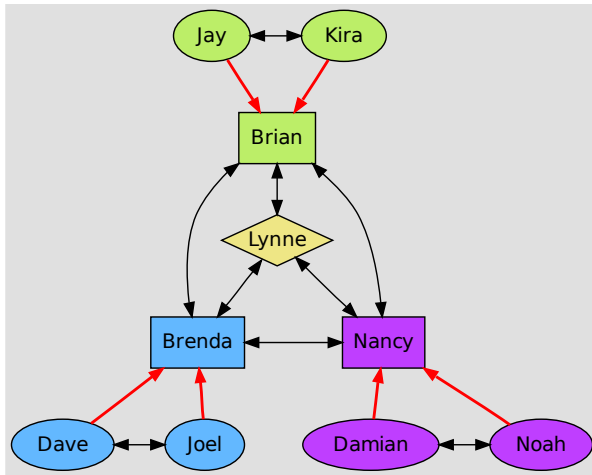
## Expertise

- Subject Area
- Technological (Selecting and Using Tools)
- Navigating politics

## Collaboration Opportunities

- Faculty in MELO
- Other faculty in home department

# Faculty Mentors ← Graduate Students



## Traditional

- Time and effort to implement faculty ideas
- More recent experiences and perspective as a student

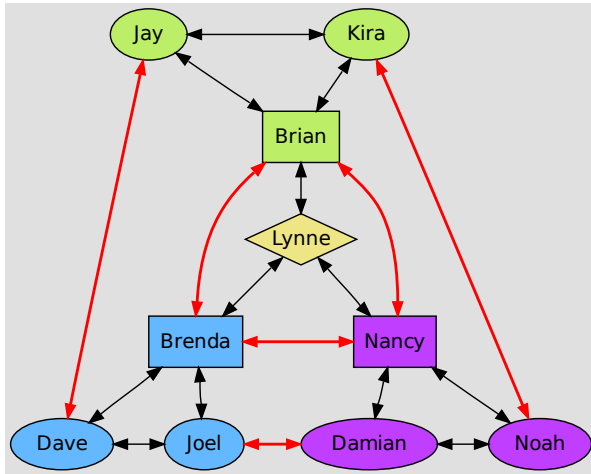
## Traditional

- Time and effort to implement faculty ideas
- More recent experiences and perspective as a student

## Collaboration Opportunities

- Source of technological know-how and exploration
- Graduate student generated ideas
- Personal interactions with students for assessment of student needs and effectiveness of learning resources
- Faculty mentor reflection on teaching strategies, assessment, instructional design, etc.

# Department ↔ Department



## Common Student Struggles

- Assess common student struggles
- Evaluate online learning resources to help
- Design resources to address struggles

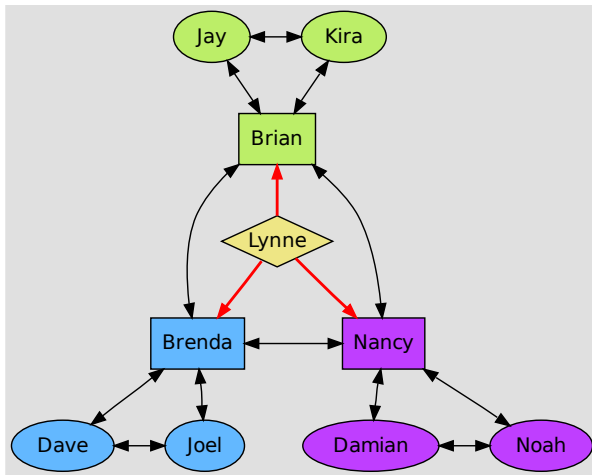
## Common Student Struggles

- Assess common student struggles
- Evaluate online learning resources to help
- Design resources to address struggles

## Sharing Ideas and Techniques

- Discussions on needs, implementation strategies, and evaluation
- “This doesn’t work for us, but it might work for you.”

# Instructional Technologies → Departments



## Tools

- Greater knowledge base of available teaching technologies (e.g. MERLOT)
- Expert knowledge of tools provided by university
- Help accessing these tools

## Tools

- Greater knowledge base of available teaching technologies (e.g. MERLOT)
- Expert knowledge of tools provided by university
- Help accessing these tools

## Policies

- Knowledge of legal issues concerning technologies
- Training in technology usage policies at UM

# Benefits of BUFD

- Training and experience selecting, using, and developing tools

# Benefits of BUFD

- Training and experience selecting, using, and developing tools
- Practice evaluating both student needs and effectiveness of solutions

# Benefits of BUFD

- Training and experience selecting, using, and developing tools
- Practice evaluating both student needs and effectiveness of solutions
- Opportunities and guidance to incorporate tools into curriculum

# Benefits of BUFD

- Training and experience selecting, using, and developing tools
- Practice evaluating both student needs and effectiveness of solutions
- Opportunities and guidance to incorporate tools into curriculum
- Guidance and practice navigating university policies

# Benefits of BUFD

- Training and experience selecting, using, and developing tools
- Practice evaluating both student needs and effectiveness of solutions
- Opportunities and guidance to incorporate tools into curriculum
- Guidance and practice navigating university policies
- Forum to participate in scholarship of teaching and learning