

Technology-Supported Strategies for Diverse Courses

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Thanks!

- **140+ institutional subscribers to TLT Group services**
- **AAC&U, ACRL, EDUCAUSE, HBCU Faculty Development Network, League for Innovation, MERLOT, NISOD, POD, SCUP**
- **Annenberg/CPB and AAHE**
- **TLT Group Founding Sponsors: Blackboard, Compaq, Microsoft, SCT, WebCT**
- **Washington State Univ. (Flashlight Online),**
- **Bucks County CC (hybrid workshops),**
- **Butler University (brief workshops)**
- **Central Michigan U (brief workshops),**
- **IUPUI (ePortfolios)**
- **George Mason U (ePortfolios)**
- **George Washington U (faculty development strategies)**
- **Old Dominion U (hybrid pro development)**
- **Gannon U (seven principles)**
- **Johnson C. Smith (ARQ)**
- **Mesa CC (Diversity)**
- **MIT (adoption of innovation)**
- **U of Nebraska (LTAs)**
- **U of Queensland (ePortfolios)**
- **U of South Florida (Second Life)**
- **U Tennessee Memphis Health Sciences (large courses)**
- **Vanderbilt U ('clickers')**
- **Virginia Tech (ePortfolios)**
- **Washington Center (learning communities)**



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“Diversity”

- ***Differences among participants in a course or workshop that, one way or another, make a difference in learning.***



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Who are You?

- ***Teaching faculty?***
- ***Faculty development/support?***
- ***Formal responsibility for some form of diversity?***
- ***Experienced in using technology to improve learning for diverse groups?***



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Why?

- ***“Balancing Act” (Schneider, Klemp, and Kastendiek, 1981) – excellent teachers continually study their students: what will engage each of them? Help each excel? (“inclusive excellence”)***
 - <http://tinyurl.com/2w9k73>

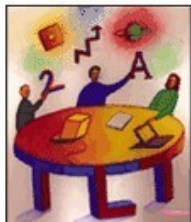


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Examples of Difference

- ***Knowledge, talents, and skills of participants***
- ***Preconceptions of participants about course content***
- ***Reasons why different students are taking the program***
- ***Technology of each learner (differing technology, skills of using technology)***
- ***Disabilities***
- ***Seating preferences (and consequences for engagement)***
- ***Race/Ethnicity***
- ***Gender***
- ***Generational differences***
- ***Culture***
- ***Disabilities***
- ***Politics***
- ***Religion***
- ***Socio-economic status; class***
- ***Sexual orientation***



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Using Technology to Help:

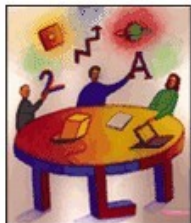
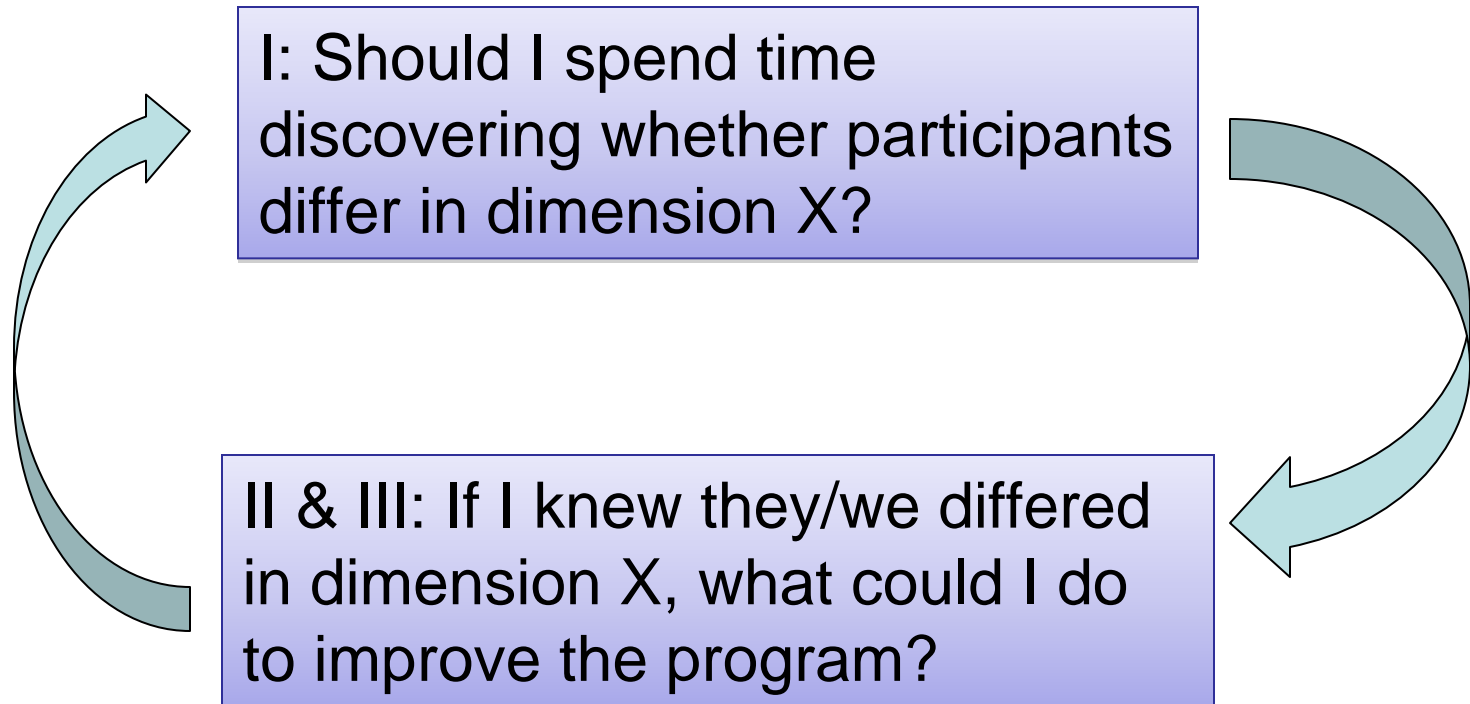
- I. Identify and explore important differences among participants***
- II. Respond to differences ('inclusive excellence')***
- III. Make the program more effective than it would have been had the participants been more homogeneous***



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Iterative Process



Learning about Participants

- ***How do I learn about participants?***
 - **Ask them to describe themselves, and/or**
 - **Give them tasks designed to reveal important differences among them (quiz, paper, calculation, design, ePortfolio, simulation, ...)**



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Ask Whom?

- ***If the questions can be answered relatively quickly and easily,***
 - Ask everyone
- ***If the exploration needs to be intensive, interactive,***
 - Ask a random sample
 - Sample that helps you focus on dimensions of difference (“Paideia”: Katz and Henry, c. 1975)



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I. Discovering, Exploring Diversity

- ***Using technology to ask participants about themselves, their thinking, etc.:***
 - Colored cards
 - Online survey
 - “Clickers” (handheld consoles)
 - Cell phone (e.g., PollEverywhere.com)
 - ?

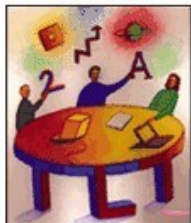


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Criteria for Selecting a Tool

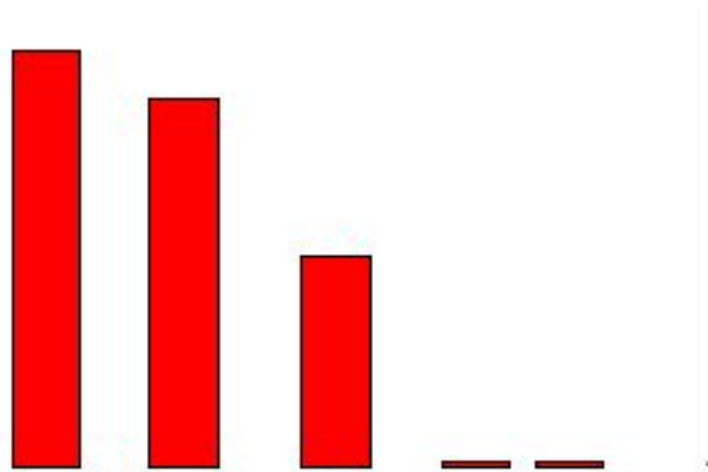
- ***Is anonymity important? Anonymity from you? From other students?***
- ***How quickly do you need the information? (ask in class? Between sessions?)***
- ***Want to display pattern to students? Instantly?***
- ***Ability to alter questions on the fly***
 - e.g., ask students about muddy points, and then poll them about their reactions to each
- ***Familiarity and cost of the tool! (low threshold)***



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Analysis/Display

- ***Multiple choice***
 - **Bar charts show how many people chose each answer**



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Your Favorite British Author?

- *Le Carre*
- *Austen*
- *Deighton*
- *Austen*
- *Shakespeare*
- *Swinburne*
- *Austen*
- *Doyle*
- *Austen*
- *Eliot*
- *Austen*
- *Byron*
- *Coleridge*
- *Eliot*
- *Lawrence*
- *Shakespeare*
- *Conrad*
- *Doyle*
- *Scott*
- *Wordsworth*
- *Shelley*
- *Shakespeare*
- *Austen*
- *Coleridge*
- *Wordsworth*
- *Marlowe*
- *Shakespeare*
- *Churchill*
- *Fowles*
- *Conrad*
- *Austen*
- *Churchill*
- *Marlowe*
- *Sheridan*
- *Newton*



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Sort Alphabetically

- *Austen*
- *Austen*
- *Austen*
- *Austen*
- *Austen*
- *Austen*
- *Austen*
- *Byron*
- *Churchill*
- *Churchill*
- *Coleridge*
- *Coleridge*
- *Conrad*
- *Conrad*
- *Deighton*
- *Doyle*
- *Doyle*
- *Eliot*
- *Eliot*
- *Fowles*
- *Lawrence*
- *Le Carre*
- *Marlowe*
- *Marlowe*
- *Newton*
- *Scott*
- *Shakespeare*
- *Shakespeare*
- *Shakespeare*
- *Shakespeare*
- *Shelley*
- *Sheridan*
- *Swinburne*
- *Wordsworth*
- *Wordsworth*

Table menu in Word: Sort



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Wordle

- www.wordle.net
- **free**



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Shakespeare

Austen

Eliot

Conrad

Marlowe
Deighton

Wordsworth

Churchill

Doyle

Coleridge

Lawrence
Fowles

Newton

Carre
Scott

Sheridan

Shelley
Swinburne

Byron

Studying Pre(Mis)Conceptions

- ***“A Private Universe”***
 - Video that begins with graduating seniors at Harvard being asked ‘why is it warmer in the summer?’”
- ***Importance of learning about preconceptions of learners early, especially when they’re wrong***
- ***Free at www.learner.org***



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Table I

Type of Diversity	How would I detect it?	What could I do if I knew?
Race/Ethnicity		
Generational differences		
Preconceptions		
Motivation for taking the program		
Prior knowledge/skill		
Religion		
Disabilities		
....		



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II. □ Responding to Diversity

- ***Using technology for inclusive excellence***
 - **Content: ‘universal’ across this diversity or choices (e.g. tracks on the web)**
 - **Media: ‘universal’ or choices**
 - **Activities: ‘universal’ or choices**
 - **Assessment: ‘universal’ (e.g., ePortfolio)**



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II. Content Choices

- ***The Web***
- ***Scaffolding: create a custom Google search engine that searches only certain sites***
 - e.g., POD search engine



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Motivation and Content

- ***Jon Dorbolo, philosophy course, Oregon State University, mid 1990s***



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Media 'Universality'

- ***Roxanne Hiltz, NJIT, research in 1980s suggests that 'disability' of non-native speakers is reduced when course conducted using online discussion rather than f2f discussion***
- ***Probably helps blind, hearing impaired as well***



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Media: Choice

- ***Thumb drives and GoogleApps to help disadvantaged at Mesa***
- ***Online courses and social networking tools to open access to programs and community for veterans, people with jobs during the day***



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III. Diversity as Asset

- ***Using technology in ways that enrich a program for everyone because the participants are diverse***



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Activities: Breakout Groups

- *Using Google Spreadsheets*
- *Using open source chat tool at Mesa College*

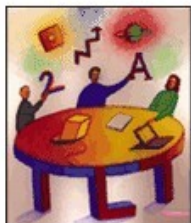


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Google Spreadsheet

	FUNCTIONAL ACTIVITIES	EXAMPLE 1	Important (X)	EXAMPLE 2	Important (x)	EXAMPLE 3
1	Student documents abilities or development for feedback, guidance, and/or assessment/certification.	Education students on prac teaching, including lesson plans, - staff feedback		Pharmacy students doing self assessments against competencies		Vet students recordings of consultations
2	Student deepens learning through reflection	Clinical pscy students - folio of clinical experience including self reflection of PD		Engineering reflective practice journal - developing reflective practice for workplace		3 semester masters - final semester reflection of learning over prior semesters
3	Student integrates experiential learning with academic learning	Vet students communication tuts roleplay and reflection		Project centred curriculum - triple bottom line, social, environmental and financial reflection		Students design and critique software
4	Student deepens learning by setting and describing personal goals	Not currently done - but very useful across entire program		First journal entry - why doing engineering? Would like final reflection against these goals		Goals - study plans, hours GPA goals



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Mesa Chat Tool



Mesa Community College

History

Anon2542: innovative	File Jan 9, 12:54:18pm
Group17: group 2: 1) Quality Global Education 2) Connecting you to a better future.	File Jan 9, 12:54:20pm
Anon8195: environment of quality, sprit of excellence	File Jan 9, 12:54:21pm
Anon2542: integrative	File Jan 9, 12:54:22pm
Anon8195: mcc a doorway to your future	File Jan 9, 12:54:24pm
Anon6340: banner, team #1 - Degree for every student.	File Jan 9, 12:54:27pm
Anon2542: positive and personal	File Jan 9, 12:54:36pm
LIB145: Banner: working together to inspire greatness for today and beyond.	File Jan 9, 12:54:38pm
Anon8195: Create a life and a living at MCC	File Jan 9, 12:54:43pm
Anon8195: Discover your potential at MCC	File Jan 9, 12:54:51pm
Anon8195: future fronteir @ mcc	File Jan 9, 12:55:01pm
LIB145: Banner: Join us to forge your future.	File Jan 9, 12:55:01pm

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Program Designs that Increase Diversity

- ***Many programs now seek to improve quality by increasing diversity, convening students from different countries***
 - **Cultura at MIT (and in France)**
 - <http://tinyurl.com/az8prx>
 - **ICONS at the Univ of Maryland**
 - <http://www.icons.umd.edu/>



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Program Design: OneMBA

- ***Executive MBA designed and offered collaboratively by 5 universities on 4 continents***
 - onemba.org
- ***Half the courses are team taught, with students working in virtual teams***
- ***Research tours by all students and faculty, twice a year (the visits are not to the campuses)***



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*Other Examples?

- ***... of using technology to enable inclusive excellence in a course or workshop? (where, otherwise, diversity would have led to advantage/disadvantage among learners)***
 - Pair up
 - Come up with one example that can be simply described
 - Report out



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Resources

- ***Draft article: <http://tinyurl.com/dkcbkc>***
- ***Online workshop began on Wednesday; register now and watch the archive of the first session***
 - ***www.tltgroup.org/calendar.htm***



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What Will You Do Next?

- ***Think***
- ***Pair***
- ***Share***



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Thanks

- *Questions?*
- *Sign-up sheet for follow-up material*



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