TEACHING IN UNIVERSITY DURING COMPLEX, YET EXCITING TIMES

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AGENDA

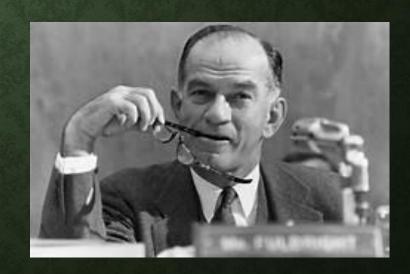
- The Fulbright Core Scholar Grant
- Teaching Today's University
 Students
- What is Active Learning? What are Interactive, Dynamic Lecturers?
- Designing Interactive, Dynamic Lectures for Active Learning
- > The Power of Learning in Groups

WHAT IS A FULBRIGHT?



FULBRIGHT SCHOLAR PROGRAM A program of the United States Department of State Bureau of Educational and Cultural Affairs. It was established in 1946 by the US Congress to "enable the government of the United States to increase mutual understanding between the people of the United States and the people of other countries."

La Commissione Fulbright favorisce gli scambi accademici tra l'Italia e gli Stati Uniti offrendo borse di studio a cittadini italiani e statunitensi per opportunità di studio, ricerca e insegnamento presso campus americani e atenei italiani.



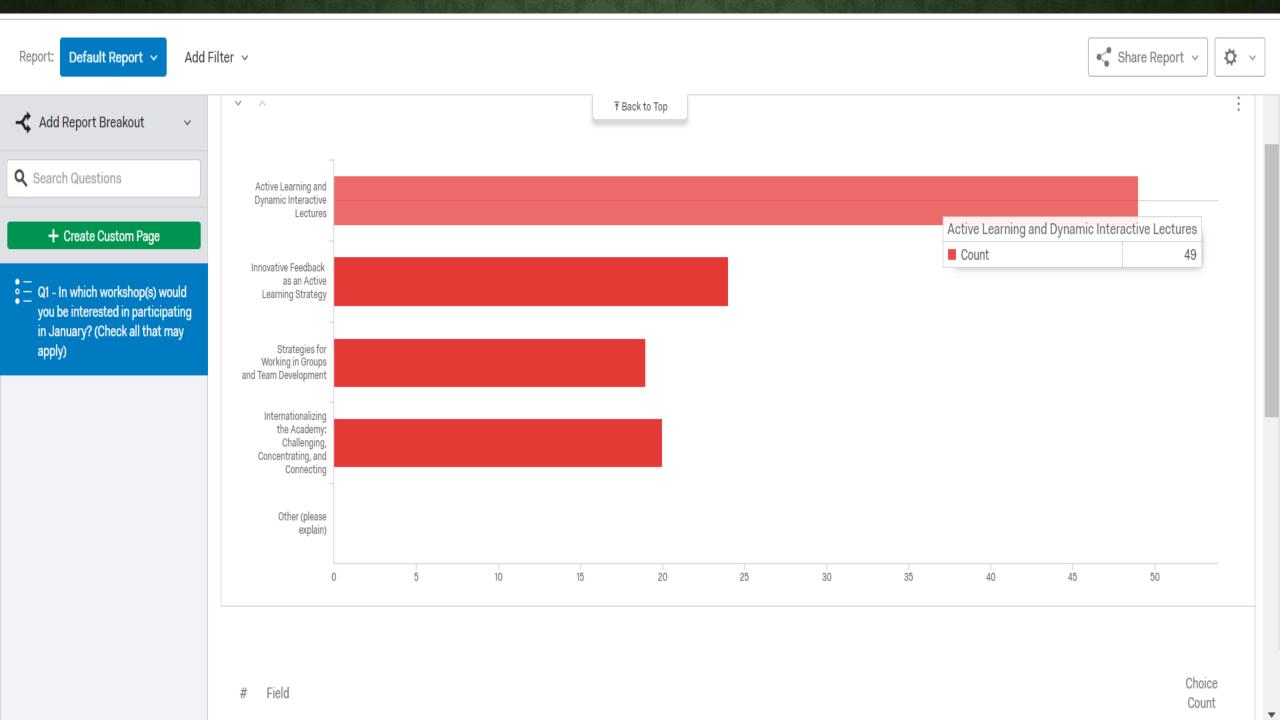
FULBRIGHT PROJECT

Research

- Survey of Italian instructors' perspectives on faculty professional development for teaching:
 - in an era of globalization and student mobility
 - international learner populations

Teaching

- PhD Program Seminars on international perspectives on learning, knowing, and engagement
- Faculty development workshops on teaching in higher education



TEACHING IN COMPLEX, YET EXCITING TIMES

Why should we consider innovations in our teaching?

CITIZENSHIP TEAMWORK VIOLENCE GLOBALIZATION COMPASSION EMPLOYABILITY SEXISM TECHNOLOGY RACISM RELIGIOUS (IN)TOLERANCE INTERDISCIPLINARITY COMMUNITY HUMAN RIGHTS COMPLEXITY STEM IDENTITY KNOWLEDGE ECONOMY TECHNOLOGY IMMIGRATION



"THINK-PAIR AND SHARE" PLEASE REFLECT: WHEN YOU WERE A UNIVERSITY STUDENT HOW DID YOU LIKE TO LEARN?

- 1. When I'm a student in a course I learn best when the instructor....
- 2. When I'm a student in a course learning is difficult for me when the instructor...
- 3. Is your teaching approach different from how you like to learn? Is so why?



IN TODAY'S GLOBAL ECONOMY, UP TO 5 GENERATIONS MAY BE WORKING TOGETHER IN THE SAME COMPANY:

- Traditionalists (born between 1928-1944)
- Baby Boomers (born between 1945-1964)
- Generation X (born between 1965-1979)
- Generation Y/Millennials (born between 1980-1994)
- Generation Z/iGen (born 1995+)





IGEN (GENERATION Z)

- Have witnessed growing income inequality
- Are family-focused
- Know they will have to work hard in their lives
- Have less experience with independent decisionmaking
- Need more guidance than Millennials
- Not as confident as Millennials
- Feel less optimistic about career prospects
- Eager to do a good job; afraid to make mistakes. Need reassurance
- Need social skills development given they have spent less time socializing in-person than any other generation
- Are **practical** and **career-focused**

Morchio & Trombetta (2017); Twenge (2018)

ADDITIONAL INSIGHTS FOR GEN Z IN ITALY

Unlike U.S. Youth (Bigi, Bonera, & Corvi, 2007)

- Heightened geographic mobility – Italian youths are well-travelled;
- Multilingual;
- Cultural transplantation
 (easy migration from
 one environment to
 another)

Italian "Gen Z Rising" (Morchio & Trombetta, 2017)

- Learning and development plans are essential
- Know they need to bring <u>practical skills</u> from Day One as they embark on their careers
- Gaining practical skills through internships or work experience while in university will most help them find employment after graduation
- New graduates ranked <u>communication and interpersonal</u> <u>skills</u> (39%), <u>problem solving</u> (36%) and <u>management</u> (31%) as the top skills they need
- Working alongside technology is less daunting than <u>mastering the softer skills of communication and problem</u> <u>solving.</u>

Most Common Student Mistakes

- Not going to class
- Not knowing how to study properly
- Poor planning and time management
- Not establishing connections with faculty
- Not asking enough questions
- Not getting enough sleep
- Poor planning for the future
- Not forming a personal network/not fitting in
- Not taking care of their mental health (anxiety, depression, substance abuse)
- Taking on too much
- Not asking for help

WHOLE GROUP ACTIVITY:

WHAT ARE SOME
OF THE
CHALLENGES
YOU FACE
TEACHING
STUDENTS AT
UNIVERSITY?

source: https://www.affordablecollegesonline.org/college-resource-center/freshman-mistakes/

FIRST-YEAR STUDENTS' PERCEPTIONS OF INSTRUCTION IN LARGE LECTURES: AMONG THE TOP MISTAKES MADE BY INSTRUCTORS

- 1. lack of engagement
- 2. faulty assumptions related to students
- 3. incomplete explanations
- 4. inappropriate pace of instruction
- 5. errors in the evaluation process
- 6. confusing information
- 7. ineffective use of teaching and learning technology (Richards & Velasquez, 2014)



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enthusiasm
      sentreprendo
tech
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THE TOP TEN SKILLS RECRUITERS WANT:

HTTPS://TARGETJOBS.CO.UK/CAREERS-ADVICE/CAREER-PLANNING/273051-THE-TOP-10-SKILLS-THATLL-GET-YOU-A-JOB WHEN-YOU-GRADUATE

- Business acumen
- Communication
- Teamwork & active listening
- Negotiation & persuasion
- Problem solving
- Leadership
- Organisation
- Perseverance & motivation
- Ability to work under pressure
- Confidence

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WHAT IS ACTIVE LEARNING? WHAT IS COLLABORATIVE LEARNING ENGAGEMENT?

- Anything a student does beside sitting and listening to a lecture.
- Learning that involves social construction of new knowledge among 2 or more learners. Requires:
 - Listening
 - Sharing ideas
 - Problem-solving
 - Diverse perspectives
 - Accountability for one's own learning
 - Creativity

WHAT IS AN EFFECTIVE LECTURE?

- When you hear the word lecture what do you think of?
- When you <u>attended</u> an effective lecture, what do you remember experiencing?
- When you gave an effective lecture, what did you do that made it effective?









INTERACTIVE ACTIVITY: "REFLECTIONS ON YOUR TEACHING"

What do you do to engage students in your classes?

- Think about an innovation you have recently included to engage your students in their learning.
- Share these on your smart phone:
 - scan the QR code here OR
 - Text <u>JOELLENCORYE946</u> to <u>37607</u> to join the session, then text a response.

FIRST THOUGHTS: EFFECTIVE LECTURES

- engage students and teacher encouraging interaction
- involve a variety of different types of lectures
- see the whole class/audience as a collection of little groups
- are collection of small "chunks" of content/lectures
- involve continual assessment



LECTURING TYPES

- Formal/Traditional Lectures
- Storytelling & Discussion-Based Lectures
- Demonstration and Online Lectures
- Interactive/Dynamic Lectures





- Student listen with minimal interruptions
- Highlights Instructor's expertise
- Equal access
- Often include visuals (enhance learning)

FORMAL LECTURES

(EISON, 2010; HARRINGTON & ZAKRAJSEK, 2017)

- Concentration dropping after 15-20 minutes (neuroscience)
- Uni-directional: passive learning
- Student-to-student talk is discouraged
- Students listen, take notes independently
- Opportunities to correct misunderstandings limited
- Instructor assessment of student comprehension minimal
- Student absenteeism often is quite high

STORYTELLING AND DISCUSSION LECTURES

- Narrative
- Relevant examples
- Orally shared
- Sometime complemented with visuals
- Capture attention
- Promote real-world connections
- Need structure

Resources include:

- Small and large group discussions
- Prior readings
- Breaks in the lecture for instructor-posed questions, time for reflection
- Connections/application of content

DEMONSTRATION AND ONLINE LECTURES

(Eison, 2010; Harrington & Zakrajsek, 2017)

Demonstration lectures

- Simulations
- Hands-on
- Multi-sensory
- Time is a factor

Mazur https://www.youtube.com/watch?v=933XY
fUZGUo

Online lectures

- Place on <u>Moodle</u>: readings, assignments, video lectures, other resources (e.g. OERs)
- Narrated presentations/ lectures
- Convenient
- Less lecture in class
- Multi-sensory
- Can include video simulations
- Time is a factor
- Tools:
 - Screen-O-Matic
 - TechSmith Camtasia

INTERACTIVE, DYNAMIC LECTURES

(EISON, 2010)

- Includes regular pauses for structured activities
- Interest wanes, use a short structured in-class activity
- Instructor can leave the podium
- Instructor's questions require responses
- Instructor is continually assessing student comprehension
- Opportunities to correct misunderstandings are provided
- Includes interactive technology (clickers, apps, cards, etc.)
- Students often work with partners/small groups
- Student-to-student talk is encouraged
- High rates of attendance often are reported

DESIGNING INTERACTIVE, DYNAMIC LECTURES

Structure:

- Reflecting activities
- Conceptualizing and practicing activities
- Applying, summarizing, and transfer activities



DESIGNING DYNAMIC LECTURES: REFLECTING ACTIVITIES

At the beginning, and throughout the lecture, engage learners in interactive *reflecting* activities

Examples:

- 1. What did we learn in the last lecture?
- 2. In your notes, list what you know about _____
- 3. Real-life example

DESIGNING DYNAMIC LECTURES: CHUNKING YOUR LESSONS

- Then, prepare mini-lectures (content chunks) of 12 20 minutes
- For each mini-lecture, pause lecturing to facilitate a conceptualizing or experimental activity individually completed or in small groups (usually 2-5 students).

Examples

- Note-checks
- Switch notes
- Explain in your own words
- Interactive responses to multiple choice or answer questions: (Dr. Eric Mazur)



DESIGNING DYNAMIC LECTURES: <u>APPLYING</u>, SUMMARIZING, AND TRANSFERRING ACTIVITIES

- End with an <u>application</u>, <u>summarizing</u>, <u>and learning transfer</u> <u>activities</u>. These ask students:
 - To reflect upon what they have learned
 - To consider what they may still be confused about
 - To connect the new information to their actual lives and how they will apply it to the world
 - To think about what more they want to know about the topic

Examples (Application Activities):

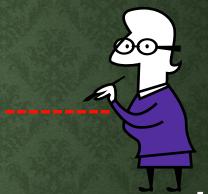
- Case studies
- Problem-based learning
- Labs, experiments
- Projects



EXAMPLES OF SUMMARIZING AND TRANSFERRING ACTIVITIES

- 2 Minute Papers
- High interest, low stakes in-class contests
- Pretesting/Quizzes/Self-assessments (online or in-class)
- Action Plans
- Team Projects

Longer activities can often start in-class and be completed outside of class



Involve active participation and dialogue!

THE POWER OF LEARNING IN GROUPS





THE SPAGHETTI-MARSHMALLOW CHALLENGE

Team Design and Development activity



SPAGHETTI-MARSHMALLOW CHALLENGE THE RULES!

Build the Tallest *Freestanding* **Structure:** The winning team is the one that has the tallest structure measured from the table top surface to the top of the marshmallow. That means the structure cannot be suspended from a higher structure, like a chair, ceiling or chandelier.

- **♦The** <u>Entire</u> Marshmallow Must be on Top: The entire marshmallow needs to be on the top of the structure. Cutting or eating part of the marshmallow disqualifies the team.
- **♦Use as Much or as Little of the Kit:** The team can use as many or as few of the 20 spaghetti sticks, as much or as little of the string or tape.
- **♦Break up the Spaghetti, String or Tape:** Teams are free to break the spaghetti, cut up the tape and string to create new structures.
- **↑**The Challenge Lasts 18 minutes: Teams cannot hold on to the structure when the time runs out. Those touching or supporting the structure at the end of the exercise will be disqualified.

Team with the tallest structure with the marshmallow on the top will win a prize!! 5. Measurement is a vertical measurement from the table top up.

REFLECTING ON GROUP LEARNING AND PROCESSES

- http://marshmallowchallenge.com/TED Talk.html
- Take a few minutes to evaluate your behavior AND your team's behavior.
- What would you change about your interactions to improve your outcome?

WHY GROUP STUDENTS? ENHANCES LEARNING

- Helps anchor new knowledge to existing knowledge
- Enhances knowledge retention
- Knowledge is better recalled in a context that it will be used
- Promotes both an intellectual/emotional connection to a topic
- Offers peer guidance and <u>immediate feedback</u>
- Facilitates synthesis and integration



WHY GROUP STUDENTS?

- Encourages attentive and respectful listening
- Develops relevant skills, decision-making, problem-solving, application
- Enhances real-world collaborative and interpersonal skills
- Encourages diversity of perspectives
- Promotes an awareness of and tolerance for ambiguity or complexity
- Promotes empathy
 Teaching is <u>about collaborating</u> among the teacher and the students!



ASSESSING THE DISCUSSION: DEVELOPING SOFT SKILLS FOR WORK AND LEARNING

- What was easy/difficult about facilitating the group discussion?
- How well did the discussion accomplish the goal of reaching consensus?
- How balanced was the discussion among the members?
- How helpful were the questions you asked?
- Was the discussion appreciative of difference and open to frank disagreements?
- Was the discussion respectful? Collaborative?
- What would you do differently next time?

TWO MINUTE PAPER



Please respond to these questions:

- 1. What are two significant [central, useful, meaningful, surprising, disturbing] things you have learned during this session?
- 2. What question(s) remain uppermost in your mind?

FINAL THOUGHTS: EFFECTIVE DYNAMIC LECTURING AND SMALL GROUPS



- Effective lecturing involves a variety of different types of lectures
- Effective lectures engage students and teacher encouraging interaction
- Effective lectures see the whole class/audience as a collection of little groups
- Effective lectures are collection of small and broken up small lectures
- Effective lectures involve continual assessment