WELCOME!

As you settle in, take a quick moment to introduce yourself to your tablemates.

We will start shortly.



WATERING THE SPARK

Giving Our Classes Back to Our <u>Online</u> Students





The Abstract



In higher education, two opposing themes are emerging-competency-based education (students prove their knowledge-prior and acquired--by successfully completing competency-based testing) and collaborative learning (students and faculty work together to create knowledge centered on and evolving around key course concepts). Together, we will take a broad look at these themes, examining ways educators can design online environments that promote active meaning-making, deep learning, and adaptive knowing in order for students to better develop the 21st century skills required to become more creative, successful students and professionals.



About Me

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- **Research Interests:** Best practices in teaching and instructional design, specifically, things we educators do that get in the way of learning.



Dobby the Dobie



Breakout! Question One

As we move through the lecture, we will pause periodically (and very, very briefly) to discuss some specific ideas.

Have someone in your group write down your answers.

At the end of the lecture, we will take some time to share and discuss our thoughts as a class.

Question One:

Pick one course you teach, or choose a class you have taken. Identify the two most important concepts or skills a student in this class will learn. Why are these important? Briefly discuss your answers with your tablemates.



Part One: 21ST CENTURY CHALLENGES



21st Century Needs: Stakeholders





Increased political pressures for public accountability and demonstrated outcomes that assess and communicate what our students are learning and if that knowledge and those skills will help students to become beneficial participants in society.

Challenge: Political Pressures

Employer demands for a highly-skilled, knowledgeable, and innovative workforce, including:

- The ability to work well in teams—especially with people different from yourself
- An understanding of science and technology and how these subjects are used in real-world settings
- The ability to write and speak well
- The ability to think clearly about complex problems
- The ability to analyze a problem to develop workable solutions
- An understanding of global context in which work is now done
- The ability to be creative and innovative in solving problems
- The ability to apply knowledge and skills in new settings
- The ability to understand numbers and statistics
- A strong sense of ethics and integrity. ("Top Ten Things . . . ," n.d.)

Challenge: Employer Demands

Student expectations for an affordable, relevant, personal, and transformative learning experience that will prepare them to compete in a global economy. Challenge: Student Expectations Faculty needs, including opportunities for a viable work/life balance, professional development, academic freedom, and administrative support. Challenge: Faculty Needs College and university concerns including attracting and retaining students, achieving and maintaining accreditation, keeping costs manageable, and so on . . . Challenge: College and University Concerns

Breakout! Question Two

Question Two:

Which of these challenges cause you the most concern? Can you identify other challenges we face as we move further into the new century? Discuss with your tablemates.



EMERGING THEMES

Part Two:



Breakout! Question Three

Question Three:

What is competency-based education, what is collaborative learning, and how might these approaches work to improve (or negatively affect) higher education? Discuss with your tablemates.



Competency-Based Model



(Western Governor's University, n.d.)

- Stems from 1960s vocational training.
- Typically delivered asynchronously.
- Students learn at their own pace, moving more quickly through subjects they find easier; moving more slowly through topics they find difficult.
- Overall, this tends to result in a reduced time to completion.
- Creates individualized instruction—not a one-size-fits-all approach.
- Generally requires less financial commitment from the student (and potentially the university or college).
- Data driven; assessment rich; measures student learning more efficiently.
- Must be continually updated to remain relevant.
- Difficult to transfer credits from institution to institution due to a lack in uniformity in how knowledge and skills are accessed. (Ford, 2014)
- In the case of WGU, faculty serve as academic advisors rather than working in traditional teaching roles.



Collaborative Learning

Collaborative learning considers knowledge to be constructed through social interaction.

- The learner or student is the primary focus of instruction.
- Interaction and "doing" are of primary importance.
- Working in groups is an important mode of learning.
- Structured approaches to developing solutions to realworld problems should be incorporated into learning. (Cornell University, n.d.)

The benefits of collaborative learning often include:

- Development of higher-level thinking, oral communication, self-management, and leadership skills.
- Promotion of student-faculty interaction.
- Increase in student retention, self-esteem, and responsibility.
- Exposure to and an increase in understanding of diverse perspectives.
- Preparation for real life social and employment situations. (Cornell University, n.d.)

Potential drawbacks to collaborative learning models include:

- Difficult to deliver asynchronously.
- Difficult to measure competencies as knowledge shifts from class to class.
- Students must rely on the engagement of others.
- Can be more time-intensive for faculty.



Breakout! Question Four

Question Four: If your institution had to adopt one of these models, which one do you feel would work better for your students? Why? What makes one better than the other? Discuss with your tablemates.



IDEAS DRIVING EDUCATION FORWARD

Part Three:



AAC&U LEAP

The LEAP initiative, forwarded by the AAC&U, promotes a set of learning outcomes to become part of the overall mission of each university or college and within individual course design efforts. These "Essential Learning Outcomes" are, as follows:

- *Knowledge of human cultures and the physical and natural world* through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts;
- Intellectual and practical skills, including inquiry and analysis, critical and creative thinking, written and oral communication, quantitative literacy, information literacy, and teamwork and problem-solving;
- **Personal and social responsibility,** including civic knowledge and engagement, intercultural knowledge and competence, ethical reasoning and action, and foundations and skills for lifelong learning
- Integrative and applied learning, including synthesis and advanced accomplishment across general and specialized studies. ("An Introduction to LEAP," 2014, p. 4)



Self-Regulated Learners

In her book *Creating Self-Regulated Learners: Strategies to Strengthen Students' Self-Awareness and Learning Skills* (2013), Linda B. Nilson defines the criteria necessary for students to become self-regulated learners:

- Strategic knowledge, which encompasses knowledge of the following: different learning strategies and heuristics for different types of tasks; the steps and algorithms needed for solving problems and executing technical tasks; the need to plan, monitor, and evaluate their learning and thinking; and effective strategies for rehearsal (memorizing), elaboration (using learning objectives such as summarizing, paraphrasing, and linking new knowledge to prior knowledge), and organization of the material (such as concept mapping).
- *Knowledge about cognitive tasks,* which includes comprehending the directions (such as knowing what the verbs mean), assessing the difficulty of the task, and deciding wisely which learning and thinking strategies to use when.
- *Self-knowledge*, which entails knowing one's strengths and weaknesses as a learner, accurately judging one's command of the material, and knowing what strategies work best for oneself to accomplish given tasks. (Nilson, 2013, pp. 2-3).



Breakout! Question Five

- The ability to work well in teams—especially with people different from yourself
- An understanding of science and technology and how these subjects are used in real-world settings
- The ability to write and speak well
- The ability to think clearly about complex problems
- The ability to analyze a problem to develop workable solutions
- An understanding of global context in which work is now done
- The ability to be creative and innovative in solving problems
- The ability to apply knowledge and skills in new settings
- The ability to understand numbers and statistics
- A strong sense of ethics and integrity. ("Top Ten Things . . . ," n.d.)

Question Five:

Going back to the top ten list of what employers look for in new college graduates, are these ideas about the future of education working to fulfill those needs? Is there anything we could add? Omit? Discuss.



Deep Learning



PEOPLE ARE MORE LIKELY TO LEARN DEEPLY WHEN (KEN BAIN):

- They are trying to answer questions or solve problems *they* find intriguing, important, or beautiful;
- They can try, fail, receive feedback, and try again before anyone makes a judgment of (or grades) their work;
- They can collaborate with other learners struggling with the same problems;
- They can speculate even before they know anything;
- They face repeated challenges to their existing paradigms;
- They can get support (emotional, physical, and intellectual assistance) when they need it;
- They care that their existing paradigms don't work;
- They feel in control of their own learning, not manipulated;



Deep Learning (cont.)

PEOPLE ARE MORE LIKELY TO LEARN DEEPLY WHEN (KEN BAIN):

- They believe that their work will be considered fairly and honestly;
- They believe their work will matter;
- They believe that intelligence and abilities are expandable, that if they work hard, they will get better at it;
- They believe other people have faith in their ability to learn;
- They believe they can learn;
- They have a chance to do the discipline before they fully know the discipline, learning the basic information *while* they engage in problem-solving, analyzing, synthesizing, evaluating, and theory-making;
- They can learn inductively rather than deductively, moving from the specific to the general rather than the general to the specific. (Bain, 2004)



GIVING EDUCATION BACK TO OUR STUDENTS

Part Four:



In essence, to give education back to our students, we must create a culture of learning where students are encouraged to:

- Explore the things they are interested in or find important—where they can "feel in control of their own learning" (Bain, 2004)
- Work in a safe environment where they can test out new ideas, be wrong, and continue working toward solutions before they are graded
- Try the discipline before they are fully immersed in it
- Collaborate with their fellow students
- Feel connected to the university; feel supported emotionally, physically, and intellectually; and feel that their work matters
- Develop their communication, critical thinking, and problem-solving skills

Meeting the Needs of the 21st Century

Further, giving education back to our students requires us to create opportunities for students to:

- Be challenged intellectually, philosophically, and socially
- Be aware of their own learning and development; knowing what they know and what they need to know for mastery
- Work in diversity-rich settings both inside and outside of the classroom
- Be innovative and creative
- Apply what they've learned to new and novel situations
- Develop a strong sense of ethical responsibility and awareness
- Develop a spirit of professionalism
- Enjoy their education in ways that inspire them to become lifelong learners

Meeting the Needs of the 21st Century

In addition, we must:

- Be transparent—communicate what we are doing , explain how we are doing it, and demonstrating how well we have done;
- Keep costs down for both the student and the institution;
- Keep our degree programs and course content relevant in a rapidly changing world;
- Keep our courses engaging and attractive;
- Encourage faculty to take control of how they reach institutional and programmatic goals;
- Encourage faculty to continue growing, and afford them the time and resources to do so.

Meeting the Needs of the 21st Century

Breakout! Question Six

Question Six:

Which of these 21st century needs are introduced, reinforced, and/or assessed in your courses and/or at your institution? Which ones are left out? Can you identify some immediate opportunities to integrate these into your course/curriculum?

Discuss.

(Note: not all factors will apply in all situations)





Design: The Big Questions



What big questions will my course help students answer (or what answers will it help them to question), or what skills, abilities, or qualities will it help students develop, and how will I help and encourage my students' interest in these qualities and abilities?

- What reasoning abilities must students have or develop to answer these questions?
- What paradigms of reality are students likely to bring with them that I will want them to challenge and how can I help them construct that intellectual challenge?
- What information will my students need to answer these questions? How will they obtain that information?
- How will I help students who have difficulty understanding the questions and using evidence and reason to answer them? What questions will I ask of them to focus their attention on significant issues, or to clarify concepts, or to highlight assumptions that they are likely to ignore? What writing will I ask them to do that will help them grapple with these matters?



Design: The Big Questions (cont.)

- - How will I confront them with conflicting problems (maybe even conflicting claims about the truth) and encourage them to grapple (e.g. collaboratively) with the issues?
 - How will I find out what they expect from my teaching? How will I reconcile any difference between my plans and their expectations? How will I stimulate students to ask good questions, and how will I create learning that follows their questions?
 - How will I help students learn to learn, to examine and assess their own learning and thinking, and to read more effectively, analytically, and actively?
 - How will I find out how students are learning before assessing them? How will I provide feedback to them before and separate from any assessment of the students?
 - How will I communicate with students in a way that keeps them thinking? (Bain, 2004)



Design: Situational Factors



The Teaching/Learning Situation

- How many students are typically enrolled in each class?
- Is the course lower division, upper division, or graduate level?
- Does the course stand on its own, or does it support other courses? (i.e. an English composition course supports writing in all courses; an introduction to criminal justice course sets the environment for future learning in the criminal justice program, etc.)
- How will the course be delivered? (i.e. are you adapting a face-to-face course to the online environment, and, if so, how will you account for the difference in medium?)

Expectations for the Course

• What learning expectations are placed on this course or curriculum by stakeholders (society; students; future employers; the university, college, program, and/or the department; the disciplinary field or profession?



Design: Situational Factors (cont.)

The Nature of the Subject

- Is this subject primarily theoretical, practical, or some combination?
- Is the subject primarily convergent or divergent?
- Are there important changes or controversies occurring within this field of study? How will you address these potential variances in your design?

Characteristics of the Learners

- What is the life situation of the learners (e.g., working, family, professional goals)?
- What prior knowledge, experiences, and initial feelings will incoming students have with this subject?
- What are their learning goals, expectations, and preferred learning styles?



Design: Situational Factors (cont.)



Characteristics of the Teachers

- What beliefs and values might different teachers have about teaching and learning?
- What might be his or her teaching skills?
- What level of knowledge or familiarity might he or she have with this subject and/or the online medium?
- What level of workload should this course expect from the teacher, and where should his or her engagement be best allotted?

Special Pedagogical Challenge

• What is the special situation in this course that challenges the students and the teacher in the desire to make this a meaningful and important learning experience? (Fink, 2013, pp. 76-77)



Breakout! Question Seven

Question Seven:

Ken Bain, in his book, What the Best College Teachers Do, claims that "people are most likely to enjoy their education if they believe they are in charge of the decision to learn" (Bain, 2004, p. 47). You are in charge now; where should we go? Are we ready to share our thoughts as an entire class?



Final Thoughts

Addressing the 21st century challenges to higher education will require a deep commitment from all of us. While we cannot hope to craft a perfect educational model that will work for all students, if we continue working the problem collaboratively, maybe instead of watering that spark, we can instead, feed a flame.



Oh, and Dobby says. "Hi."



References

- An introduction to LEAP. (2014). American Association of Colleges & Universities. Retrieved from https://www.aacu.org/sites/default/files/files/LEAP/Introduction_to_ LEAP.pdf
 Bain, K. (2004). What the best college teachers do. Cambridge, MA: Harvard University Press.
 Cornell University. (n.d.). Collaborative learning: Group work. Cornell University Center for Teaching Excellence. Retrieved from http://www.cte.cornell.edu/teaching-ideas/engaging-students/collaborative-learning.html
 Fink, L. D. (2013). Creating significant learning experiences: An integrated approach to designing college courses. San Francisco, CA: Jossey-Bass
 Ford, K. (2014). Competency-based education: History, opportunities, and challenges. UMUC Center for
- Innovation In Learning and Student Success. Retrieved from http://www.umuc.edu/innovatelearning /upload/cbe-lit-review-ford.pdf
- Nilson, L. B. (2013). Creating self-regulated learners: Strategies to strengthen students' self-awareness and learning skills. Sterling, VA: Stylus Publishing.
- Rotherman, A. J., & Willingham, D. (2009 Sept.). 21st century skills: The challenges ahead. *Teaching for the 21st Century, 67*(1). 16-21. Retrieved from http://www.ascd.org/publications/educational-leadership/sept09/vol67/num01/21st-Century-Skills@-The-Challenges-Ahead.aspx
- Top ten things employers look for in new college graduates. (n.d.). *American Association of Colleges & Universities*. Retrieved from http://www.aacu.org/leap/students/employers-top-ten
- Western Governor's University. (n.d.). How a course works: Prove what you know and move forward. *WGU Missouri*. Retrieved from http://missouri.wgu.edu/education/master_science_curriculum_instruction



Have a Great Conference!

