

The New Sage on the Stage: Teaching Generation Z to Learn
Lilly Conference: Teaching for Active & Engaged Learning
March 2, 2019

Learning Needs	Teaching Strategies	Recommended Student Activities
<p>Learning by Doing Students prefer to learn by jumping in and figuring it out (Prensky, 2009). This favors hands-on learning especially in technical fields. High academic learning is often less practical experience (Weimer, 2013; <i>Chronicle of Higher Education</i>, 2018).</p>	<p>Faculty should create immersive environments in which students can engage in problem-solving independently, with peers, in pairs, and in small groups. Students should apply concepts and find solutions (Weimer, 2013; <i>Chronicle of Higher Education</i>, 2018).</p>	<p style="text-align: center;">Small Group Problem Solving</p> <p>Students work in groups of 2-3 people to solve a problem. Instructor should introduce the activity with minimal verbal instructions along with brief written instructions. Students work together to understand the problem, apply course concepts, offer potential solutions, and/or solve the problem. The problem should be a relatively complex “real world” problem in which multiple approaches can be considered and/or tried.</p>
<p>Risk Taking Students and young adults are more likely to engage in risky behavior. They may delay later to get licenses to drive or engage in sexual intercourse. They are more likely to drive and drive recklessly. Although much of this is due to parents, the lack of consequences for parents, the ease of access to cars, and the chances have increased (Weimer, 2013; Brown, Roediger, and McDaniel, 2014).</p>	<p>Faculty should provide students with opportunities to participate in low-risk activities. Instructors who give up “control” and allow students to participate in self-discovery will likely see greater participation in class discussions and activities. Semi-chaotic activities in which mistakes are an expected part of completing the activity are a good way to lower anxiety. (Weimer, 2013; Brown, Roediger, and McDaniel, 2014)</p>	<p style="text-align: center;">Interactive Matching Game</p> <p>The instructor creates a matching game using two different colors of index cards. On each card bearing color #1, the instructor will write the name of a course concept or skill. Index cards bearing color #2 should contain corresponding examples, definitions, explanations, descriptions, etc. (one per card). The cards are then distributed so that each student in the class gets one index card. Students are then instructed to mingle amongst their classmates until they find a student with a card that matches their own. (For example: A student with a vocabulary card is looking for a classmate holding the definition for that word.) Students will need to walk around the classroom, talk to each other, and work together to find their corresponding person. <i>Note: In cases of odd numbers of students, a student holding a concept card might match two students (one holding a definition and one holding an example).</i></p>
<p>Digital Reading Digital reading includes sequencing, referencing, synthesizing, and connecting, organizing, applying, problem-solving, and representations. The brain's wiring circuitry in the brains of students is affected by the amount of time they engage with screens. Factors such as the nature of hypertext and the design of text, eyestrain, lack of focus, and difficulties in the location of text, perceptual issues, and devaluing e-text, multi-tasking, and multitasking (Carr, 2010; Wolf, 2018; Baron, 2015).</p>	<p>Cognitive scientists suggest teaching students to become bi-literate on both the digital and the print media. Students should be taught to switch between the two tasks and recognize the differences between reading online and in print (Wolf, 2018; Baron, 2018). Provide students with opportunities to interact with text in multiple formats. Following initial assignment of reading material, faculty should construct situations in which deep-reading and thinking processes are simulated in the classroom by facilitating activities in which students actively engage with the text to develop a holistic understanding of text meaning, purpose, and implications (Baron, 2015; Cull, 2018; Mangen, 2016; Wolf, 2018).</p>	<p style="text-align: center;">Making Text Meaningful</p> <p>Instructor assigns a reading to students for homework. When students arrive in the next class, they will be presented with two sets of index cards: one set will contain parts of the written text of the assignment. The other set will contain illustrations, charts, graphs, or other visual aids that depict the material covered in the reading. Students must sequence the text and match the illustrations with the corresponding written text and put the material into the correct sequence. Students should complete reading graphic organizers (RGOs) for complex readings. These chart-like notation devices enable students to physically document various aspects of critical analysis including identifying key quotes and paraphrases with page numbers; student-generated consolidation of ideas; inferences; historical, cultural, biographical, and/or literary references and connections; illustrations, process charts, personal connections; predictions; answers to focused questions; and student reflections.</p>

The New Sage on the Stage: Teaching Generation Z to Learn
 Lilly Conference: Teaching for Active & Engaged Learning
 March 2, 2019

Learning Needs	Teaching Strategies	Recommended Student Activities
<p>Lonely and Depressed</p> <p>Students appear to be apathetic and disengaged. Young people are suffering from anxiety and depression, “techno-brain burnout,” which prevents them from fully engaging in their studies (Twenge, 2018; Small & Vorgan, 2019).</p>	<p>Faculty should cultivate supportive learning environments by showing concern for student learning and well-being. This includes building rapport, asking about and responding to student learning needs, maintaining flexibility, showing empathy while maintaining discipline, explaining assignment purpose, encouraging reflection, and providing opportunities for the development of affective bonds by using a variety of interactive learning activities (Kahu, 2013; Yang and Damsio, 2007; Weimer, 2013; Supiano, 2018); Cavanagh (2016).</p>	<p style="text-align: center;">Making Connections</p> <p>To demonstrate concern for students as learners and as human beings, instructors should facilitate some type of “getting to know you” activity within the first week of class and follow it up with several “check-ins” throughout the semester. “Check-ins” include facilitating the exchange of study strategies between peer groups, initiating personal contact with each student to ask about current progress and challenges, requiring struggling students to meet one-on-one, encouraging peer study groups before major assignments/tests, celebrating achievements (both small and large) and recognizing personal improvements through verbal commentary and written notations on assignments or tests.</p>
<p>Overwhelmed</p> <p>Students expect an instant answer to questions or communication (Berk, 2009). They prefer speed and interactivity in learning environments. Traditional lecture environments require students to “power down” their brains (Wolf, 2018; Baron, 2015).</p>	<p>Teachers should allow as many activities, assignments, and active learning exercises as possible to let students function at their preferred speed (Berk, 2009).</p> <p>However, instructors should also adjust the pace of class activities to the learning objective e.g. by providing opportunities for deeper-level processing and reflection to counteract the effects of completing tasks hastily (Wolf, 2018; Baron, 2015)</p>	<p style="text-align: center;">Dynamic Learning Environments</p> <p>Instructors create dynamic learning environments in which lecture activities, and assignments are “chunked” by pedagogically-sound periods of time. Instructors should make pedagogically-sound choices about teaching mode, activity goals, and physical space throughout the class period.</p> <p style="text-align: center;">Timed Pair-Share & Mixer</p> <p>After listening to a short lecture, students have a 1-minute period (or other brief time) while working in pairs to make a list of concepts and other items covered in the lecture. Afterwards, students form new groups of four and engage in the same process. Instructors might choose to move individual students to other groups to facilitate further sharing of ideas as students create a lengthy, but accurate list. The fast-paced activity is followed by a reflection, in-depth discussion of the list, and a problem-solving activity in which they must use the list.</p>
<p>Multi-tasking</p> <p>The ease of students doing multiple tasks includes: work documents on a tablet or computer screen, multiple windows open, cell phone with social media notifications, and music (Tapscott, 2009).</p>	<p>Faculty should be mindful of their own technology practices and model environmentally appropriate behavior. Instructors should share the research about the effect of distracted learning with students and use metacognitive strategies with students so that they can learn to monitor their reactions to distractions. Faculty should provide opportunities to think deeply and creatively by creating an active and engaging, distraction-free learning environment (Carr, 2011; Wolf, 2010)</p>	<p style="text-align: center;">Mindfulness</p> <p>Instructors lead students through brief timed periods of quiet in which the class environment is free of all types of stimulation and everyone has a chance to relax their minds and bodies and “be still.” Additionally, instructors can follow-up by asking students to engage in written reflections about their learning in the previous segment. Possible reflection prompts include asking students to reflect on the most intriguing concept of that class period, to summarize lecture content, to restate any instructions or guidelines, to write down questions, emotions, and reactions.</p>

The New Sage on the Stage: Teaching Generation Z to Learn
Lilly Conference: Teaching for Active & Engaged Learning
March 2, 2019

Learning Needs	Teaching Strategies	Recommended Student Activities
<p>Attention Spans Digital habits of people in their 20s are checking their cell phones 150-190 times a day. Hyperattention, rapid task switching levels of stimulation, and boredom (Wolf, 2018). (Wolf) attributes the inability to focus on and slow lectures.</p>	<p>Design activities that prime students to listen actively i.e. make them work to understand the information as they listen. Assign “naïve tasks” i.e. activities that reveal the gaps in their knowledge (Gooblar, 2019). Create opportunities for students to be actively engaged in problem solving, role playing, and activities designed for retrieval of information (Carner, 2014). Engage students through the use of “Minute Papers” (Barkley, 2010).</p>	<p style="text-align: center;">Cultivating Focus</p> <p>Instructors present a brief lecture, not longer than 10 minutes, including or followed by a brief activity that checks students’ understanding of the content of the lecture. This can be accomplished with guided notes “on the go quizzes” (they complete the quiz as they go), instant pop quizzes and/or the minute paper. Students reflect on the content of the presentation and write down questions or comments that they would like to ask or share at the end of the presentation. Ask students to take turns leading their classmates through previously learned material.</p>
<p>Learning Graphics Students are drawn to graphics leads to a preference for illustrations (Prensky, 2009). Students will often ignore step-by-step instructions unless images are present (Tapscott, 2009). Students remember pictures more easily (Brown, Roediger, and McDaniel, 2014). Students have been shown to be averse to text; preferences do not mean students will only learn one way (Brown, Roediger, and McDaniel, 2014).</p>	<p>When students construct a mental or physical image to associate with a specific concept, the material is easy to retrieve from memory (Brown, Roediger, and McDaniel, 2014).</p> <p>Create graphics, images, and visual representations to help students understand key concepts. Also, create tasks and activities which ask students to develop visual demonstrations of the course content (Brown et al., 2014; Berk, 2009).</p>	<p style="text-align: center;">Creation of Teaching Graphic</p> <p>Instructors provides flip charts, construction paper, markers, magna tags, scissors, or other necessary supplies. Students work together in small groups to create a graphic illustration that integrates instructor-specified course concepts and ideas. Students should present their final product to the class and explain how their illustration incorporates the pertinent concepts.</p>

Dr. Jennifer Davis
San Jacinto College-North
Department of English
5800 Uvalde Road, Suite N8-274 | Houston, TX 77049
Direct: (281) 998-6150, ext. 7374
j-davis@sjcd.edu



Izabela Uscinski, Ph.D.
San Jacinto College-North
Professor of English
Department of English and Modern Languages
5800 Uvalde Road, Suite N8-272 | Houston, TX,
Direct: (281) 998-6150, ext. 7312
Izabela.Uscinski@sjcd.edu