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Tomorrow's Teaching and Learning

Creativity and the Flipped Classroom

In the September 2013 issue of National Teaching and Learning Forum, Marilla Svinicki describes the active-learning principles underlying the currently popular flipped classroom, emphasizing that this new model is "hard on the instructor" because of the uncertainty of the direction of classroom activities (12). Often equally daunting is devising those very materials and formats to be used during the flipped class time. We'd like to suggest some strategies that will both keep the focus on higher-order learning skills such as creativity and at the same time model the creative thinking skills of the instructor. But first, here's a review of commonly accepted flipped-class- room practices. In the traditional classroom - i.e., lecture hall - instructors lecture during class time with students reading assignments outside of class beforehand. The flipped classroom reverses the assignments and often even instructor and student roles. Prior to class, students prepare assignments, which usually means reading specified materials and watching videos as in the traditional format, but also perhaps reviewing PowerPoint slides of what would have been presented in the upcoming class session. In class, the instructor devotes the bulk of time to engaging in activities that promote higher-order learning. Flip To A Higher Order Higher-order learning, according to the revised Bloom's taxonomy (Anderson and Krathwohl 2001), consists of moving beyond remembering and understanding to applying, analyzing, evaluating, and creating. While instructors often devise in-class assignments based on applying and analyzing, creating-the most complex mental function-is the skill Anderson and Krathwohl placed at the top of the pyramid. Creating-née synthesis in the 1956 Bloom's taxonomy-can mean myriad things: • placing elements into a meaningful whole or pattern, • restructuring

elements into a new whole or pattern, or • generating a new and useful product or process. Creative thinking can be considered a discipline-general skill, and while every discipline offers different challenges, we're going to provide some examples of creativity from the discipline we know best. You should be able to apply these examples to your discipline. Lit Demo Suppose for a while you're a student in Professor Gray's Introduction to American Lit, and before you come to class you read Edgar Allan Poe's classic piece of fiction "Ligeia" and watched the professor's video on the life of Poe. When you enter class, Professor Gray makes a statement about minds traditionally viewing events through the filter of rational thought and lists some items on a whiteboard: • a narrator proficient in "meta-physical inquiry" and the "mysteries of transcendentalism" • the narrator's references to supernatural beings, such as Arazel, the daughters of Delos, Ashtophet, and even God • the narrator's purchase of an ancient abbey containing "specimens of semi-Gothic, semi-Druidical device" • a dying woman whom the narrator does not love as much as Ligeia, a dead woman from a previous, intense relationship • a ritualistic censer • a long incantation by the narrator • the sudden transformation of the dying woman into Ligeia, the woman believed dead. Then you are asked to create a meaningful pattern for this barrage of information from the text you read the night before (perhaps near midnight). Obviously, Professor Gray favors active learning over rote recall (e.g., What's the name of the narrator's second wife?) and lecturing. In fact, Professor Gray refuses to explain the significance of the above details. Perhaps to help you, he places you in a group so you can collaborate on small glimmers caught by individuals. Or maybe the professor supplies you with an extra piece of information on which you can piggyback: "Glanville, the scientist who wrote the story's introductory quote, also penned Sadducismus Triumphatus, a volume about the truth of witchcraft." Perhaps at this point your vision begins to crystallize around a fundamental and powerful insight: "Ligeia" can be read as a story told by a warlock about a ritual he performed to bring his beloved wife back from the dead. While Professor Gray could have lectured on this evidence and provided this brilliant insight into a view of Poe's story, instead the Prof provided the necessary format for you to create a pattern. In this scenario, active learning triumphs passive note-taking. Now Professor Gray asks your group to consider another question: "Why were you provided the first piece of information about how minds, even in the nineteenth century (following the Age of Reason), tend to perceive events within a rational framework?" Just as your group arrives at that brilliant flash of insight-"perhaps Poe was trying to challenge the traditional assumption about the mind's perceiving rational order"-Professor Gray reorganizes you into another configuration of groups and asks you to pick through the story,

playing like Sherlock Holmes (or Poe's own detective, Dupin) to brainstorm any story evidence that would support the supposedly discredited rational view of the world-you're switching from induction to deduction. At a bare minimum, Professor Gray is asking you to demonstrate another perception shift (presumably the night before you viewed the story from a rational perspective and during class switched your allegiance to an irrational point of view). No doubt you find this exercise difficult because when we first discover a pattern on our own, we tend to cling to it (some psychologists we know call this adhesion the primacy of the first), but you accumulate details, such as the narrator's admission to using an "immoderate dose of opium," that he is emotionally spent due to the loss of his first wife, and that on the night of the story he is extremely tired. Finally your group forms an opposing pattern to your first viewpoint: Poe's narrator is hallucinating; through his burnt-out mind, he has a wish-fulfilling vision. Ah, the world is rational after all. But, Professor Gray prods, "can you shift your perspective still one more time? If Poe indeed provides equal evidence for both a rational and an irrational interpretation," he inquires, "what do you suppose the master of the Gothic tale was trying to say?" He requests that you answer first by writing down a single statement of intent and then sharing it with the group. Think alone, then think as one. Each group articulates a declarative sentence and then reports to the entire class with statements such as: Poe was merely suggesting that human beings are capable of both rational thought and irrational. And just when you're thinking it's time to be saved by the bell, Professor Gray imparts one more fact: "The metaphor 'saved by the bell' comes from Poe's time-coffins were built with surface bells so that if one came out of a coma and found herself prematurely buried, she could ring her bell from a coffin apparatus in order to be saved." Gray continues, "Since you are now familiar with metaphor, construct your own for this what-if scenario: Suppose you have been chosen to edit a Poe collection, a new and useful product called *Ligeia and Other Stories*. Create a cover complete with image/metaphor so as to give perceptive readers a Dupin-like (remember, he's Poe's own detective creation) clue to the author's intent." After listening to your individual and class suggestions, Professor Gray reminds you how his PowerPoint slide which you viewed prior to class offered an excerpt quote from "The Raven" and displays his own cover--a raven perched on the bust of Pallas Athena. Creativity Review

Luckily, as the good professor starts to explain his choice that Athena represents reason and the raven irrationality, you are saved by the literal ringing of the class bell. Do you say "Nevermore" to the active learning of a flipped classroom, or do you take something else away? Professor Gray has utilized and modeled some basic strategies of creative thinking that you can now adapt. In discerning a pattern, developing your own, and even inventing a new and useful

product, you have started to learn: • Pattern-recognizing • Collaborating • Glimmer-catching • Piggy-backing • Playing • Metaphor-making • Brainstorming • Perception-shifting

How well does flipping work? As Goodwin and Miller (2013) stress, "To date, there's no scientific research base to indicate exactly how well flipped classrooms work" (78). However, a large body of evidence demonstrates that using higher-order learning skills such as "creating" develop deep learning.

References

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