ADDING SOME TEC-VARIETY

100+ Activities for Motivating and Retaining Learners Online

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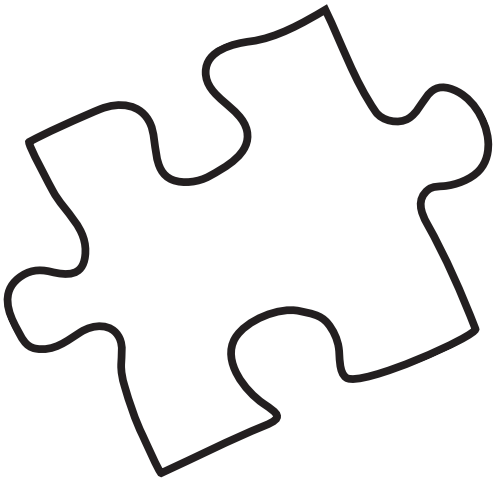
CHAPTER SEVEN

PRINCIPLE #4 VARIETY



(Includes Novelty, Fun, and Fantasy)

> The secret of happiness is variety, but the secret of variety, like the secret of all spices, is knowing when to use it.
>
> —Daniel Gilbert

Hank Stram, the Super Bowl–winning coach of the Kansas City Chiefs, was once asked about his coaching philosophy. In response, Stram said, "My philosophy? Simplicity plus variety." Stram was known for his innovative play calling and groundbreaking motivational techniques. Given his induction into the American Pro Football Hall of Fame in 2003, his use of variety and simplicity certainly worked.

Variety is also vital across educational settings. The term *variety* is equated by teachers with the use of atypical activities, resources, and experiences (Brophy, 1998). In F2F settings, those less than common events often include guest speakers, field trips, and unusual artifacts. Such events are relatively common in online courses and might not be considered variety at all. When you're teaching online, variety could mean almost anything.

As implied in the underlying mnemonic of this book, variety is a key component of the TEC-VARIETY framework. It is also the fourth principle of the TEC-VARIETY mnemonic. In fact, it is crucial for any type of training or educational experience, no matter the age of the participants, their backgrounds, or the level of the course. Variety is needed to maintain learner alertness and interest. How many classes or professional

development experiences have you had in the past that were stagnant, or worse, lifeless and awaiting a coroner's reporter to explain the cause of death?

Repeating tasks might be beneficial for those new to an online course and highly tense about the learning activity or situation. However, such repetition will quickly turn to boredom if you do not properly gauge the learning context and fail to engage your learners. Students appreciate variety and the sense that there is something new to master, whether it is a novel use of a technology tool or a set of concepts to learn that are displayed in a unique manner. With the range of online activities in this book, instructors have much to contemplate to ensure that their students are not bored. Instructors might rely on brainstorming to inject new life into an otherwise dull experience. Online brainstorming can happen in a discussion forum, wiki, chat, or Twitter feed, to name just a few options.

The variety principle also includes elements of novelty, fun, and fantasy. Prolific inventor and shrewd businessman Thomas A. Edison once claimed, "I never did a day's work in my life. It was all fun." In a similar vein, American writer and lecturer Dale Carnegie stated that "People rarely succeed unless they have fun in what they are doing." What both Edison and Carnegie realized is that when we are in a state of flow there is less of a sense of looming failure or task difficulty. Instead, we are focused on finding needed knowledge and crafting a viable, if not award-winning, solution. Having fun along the way is intrinsically motivating. So much so that students tend to forget that they are, in fact, learning something that previously was quite difficult or beyond their reach.

The problem is that the fun aspects of education are too often seen as frivolous and unrelated to the goals of mastering the assigned material. Such notions are so pervasive that most traditional forms of learning end up so dreary and mind-numbing that learners often sleep through their F2F courses and drop out of their online ones. There is nothing that excites them. Learning need not be boring or rote, however, to have impressive results. For instance, as shown later in this chapter, popular songs and sonnets can be repackaged by instructors and students to learn the history or science content in a unique and highly memorable way.

Fun, fantasy, and novelty are often synonymous with the use of computer games for learning. As mentioned in Chapter Three, in his dissertation research on computer games at Stanford over three decades ago, Thomas Malone (1981) discovered that fantasy and fun fulfill significant emotional needs for players of such games. As we shall see, the types and delivery formats of computer games have exploded all these years later. Mobile games are fast becoming ubiquitous and highly popular in both formal as well as informal education. Students enjoy games. Not too surprisingly, then, enjoyment is a key variable in predicting student motivation to succeed in online courses (Teng, 2008).

Building on the importance of enjoyment, play, creative expression, and choice in learning, in their book, *A New Culture of Learning: Cultivating the Imagination for a World of Constant Change*, David Thomas and John Seely Brown (2011) detail a movement toward a new model of learning. Their model emphasizes learning environments in which digital media offer a rich array of information in addition to intensely engaging opportunities and options to play and experiment with knowledge. In these digital worlds, students participate in a specific culture or practice instead of simply being taught about it. In contrast to education as a series of tests on what we know or have effectively

received from others, in this new age we must ask questions about what we do not know, ponder what-if scenarios, and engage in inquiry for incremental as well as exponential results. We no longer simply learn about the world; instead, in this new culture of learning, we help re-create it.

In the spirit of this chapter, Thomas and Brown argue that change in education is a constant. In past centuries, information that was taught in most courses and disciplines was altered or updated at a relatively slow pace. Given the stability of most knowledge, it could be taught directly to passive learners. Teaching in such a manner had long-term benefits for the learner as well as the instructor. Everyone was happy.

Echoing the sluggish pace of change in education, the evolution of learning technology was monumentally slow too—at least until online technology emerged on the scene. As Thomas and Brown note, widespread adoption of color television evolved over 70 years after the initial invention of the color television signal in 1929. Today, technologies like YouTube, Twitter, and Wikipedia take less than a year for educators to begin to embrace and integrate into their courses. Even more amazingly, millions of people adopted mobile technologies like the iPhone and iPad seemingly overnight.

Although educational and training norms and practices of the previous century align well with the overriding stability of knowledge, this century requires educators and learners who can embrace the changes happening around them and are looking forward to what is on the horizon. From the viewpoint of Thomas and Brown, "Change motivates and challenges . . . change forces us to learn differently" (2011, p. 43). They further argue that this transformational perspective requires us to begin to view the future from the standpoint of unique possibilities and the ability to take advantage of a world in motion. We can no longer be taught or trained for each tool, procedure, or policy that we will encounter in the real world.

Finally, Thomas and Brown point out that successful participation in this highly digital world requires extensive opportunities for play as well as sharing, messing around with ideas, and simply hanging out with others. When learners work out creative solutions in their minds as a result of messing around with remixed film footage, alternatives in an intense game, or information in an online database, they have the chance to generate and contribute knowledge, not just receive it. Play connects the information networks we hang out in, such as Facebook and Ning, to the active experimentation now possible in the Web 2.0 with massive multiplayer online games, virtual worlds, and online science experiments. Thomas and Brown emphasize the connection between play and imagination. For them, we no longer just learn to play—we play to learn.

This fourth principle of TEC-VARIETY, involving variety, fun, fantasy, and novelty, does just that. There is much serious play here. The 10 activities in this chapter offer glimpses into what is possible online in this new culture of learning, especially with intense episodes of play.

Technologies for Principle #4: Variety

Given the pace of technology change in the twenty-first century, it is difficult to equate Principle #4 with any particular learning technology. Fun, fantasy, variety, and novelty—such words raise the eyebrows of administrators, while at the same time grabbing the attention of learners across age groups. Any teenagers spontaneously flipping the pages of this book and suddenly stopping on this page or chapter might be saying, "Where do I sign up?" They can easily envision scenes where mobile games and virtual worlds stream to them at a moment's notice.

What about older learners? Today, some may consider interactions in virtual worlds or learning games and simulations on a mobile device a healthy and fun change of pace. Many others will not. Some might want synchronous experiences with experts and reassurance that they are on the "right" learning track. Others will savor the chance for personal discovery in some type of self-directed learning system.

Tomorrow, the more intriguing technologies might be the use of artificial agents, robots, and three-dimensionally displayed learning portfolios that capture, analyze, and then categorize real-world footage of a student's learning journey. Think about the immediacy of learning with wearable computing like Google Glass, for instance. In later tomorrows, electronic mentors and guides available on demand might provide a highly essential and intriguing addition to an online class or training program. Video content streamed to a watch or displayed on the outside of a coffee mug might be extremely novel today and ho-hum news tomorrow. In ten years, we might be watching that same video on sides of buildings or displayed on buses as we walk past, or perhaps even projected on the backs of people in front of us as we stroll through cities.

The technologies for varying the learning environment may also be contingent on the content area or discipline, time of day, year in the program, or progress in the course. For instance, early in a course, a blog reflection or discussion board could seem unique. Later in that same course, a chat with a guest expert or a live experiment from another corner of the world might be better to capture student interest. Of course, with a little imagination, the same technology tool or resource can be used in dozens of engaging ways. Such variety is always within reach. It may be time to reach out.

In terms of true novelty, an activity that you have designed for your course could be something no one in the world has previously attempted. Back in 1995, for instance, Bonk and his colleagues at Indiana University linked two videoconferencing systems together—CU-SeeMe and PictureTel—as a means to bring in guest speakers whose articles his students were currently reading (Bonk, Appelman, & Hay, 1996). That may have been the first such linkage of these two separate videoconferencing systems for one instructional event. Fortunately, it worked even better than planned. The students had read and critiqued the articles of the guests in an asynchronous discussion forum prior to the live event. Students who had previously found little or nothing to like about the assigned articles and associated topics (which included the impact of computer programming on thinking) were the same ones who were agreeing with everything that

both the guests said during the live discussion. The guest videoconferencing experience totally changed their perspectives.

Such an idea represented novelty and variety back in the 1990s. In this century, we will find ourselves coming face-to-face with a sea of technology-enriched situations that we have yet to dream about. Dream big dreams, and be prepared for a fun but bumpy ride.

Ten Online Activities in Principle #4: Variety

Activities to vary or modify the instructional setting are nothing new for those with teaching experience. Teaching online and blended courses, however, presents instructors and training coordinators or directors with more opportunities for changing the learning environment than ever experienced before. Some of the ideas we describe will be filled with fun. Others will engage learners in fantasy or dream worlds. And you will likely consider many, if not most, of the activities quite novel.

Keep in mind, however, that as with curiosity in the previous chapter, there may be some activities at the high-end risk continuum that you may need to modify or skip for now. An online séance, anyone? How about venturing into extreme teaching or giving your students a second life? You may decide to skim quickly through these ideas. That is fine. We are not expecting anyone to try them all. They will await your return on another day.

Activity 31. Online Séance or Roundtable

Description and Purpose of Activity. One popular method that we use to engage people in fantasy worlds is to hold some type of live online meeting or asynchronous discussion forum where students take on different personalities or personas. Students can engage in a role-play situation in which they each sign up to take on the persona of an influential figure in the field. Before carrying out the role play, they could be assigned articles, chapters, news reports, or biographies to read about (or written by) that person. If available, they could also watch popular video lectures, virtual presentations, or online interviews of that person.

With such resources to immerse students in, mock trials or courtroom simulations are possible. For the purposes of this activity, we will focus on the idea of an online séance or roundtable. For those interested in more information on how to conduct an online role play or mock trial involving personality traits or types of people, see Bonk and Zhang (2008).

To set up an online séance (or roundtable), have students brainstorm a list of famous people from the field who are no longer living. Each individual mentioned might be added or fictitiously enrolled in the course. Based on this list, students would enter the course discussion forum or synchronous conferencing system posing as a particular individual. Once logged in, they could make entries or contributions from the perspective of that person.

In an online séance for a psychology course, for example, students might be Jean Piaget, Sigmund Freud, B. F. Skinner, Abraham Maslow, Carl Rogers, and so on. You could assign them a particular news item, government policy, or current issue in psychology to discuss and debate. If an asynchronous discussion forum is used, ask students to show up in costume after dark and make contributions by candlelight. If the session is a live synchronous session, students could use their Webcam and come in costume. Stretching this activity further into the land of fun and fantasy, they could also make a mask of their assigned person using a photo found online. Colleagues could enter as guests taking on the roles of people not chosen by the students in the class. In responding to the selected issue, topic, or event, students could read direct quotations from books and articles written by or about their assigned person.

Skills and Objectives. Includes appreciation of multiple perspectives, content review, concept application, critical thinking, problem identification, and problem solving. This technique forces students to reflect on how the content they are learning generalizes to people and places around the world.

Advice and Ideas. Be sure to define all roles and activities in sufficient detail. Students must understand where to post, the timing of the event, and how much and how often to respond. The first time you use this method, allow students to sign up for particular roles. Give much choice and freedom. If it is a séance, you will need to find a medium to conjure up spirits. See what happens. Based on that experience, you may have to create more structure or assume greater control over the activity. If you run this activity more than once or on multiple weeks, you could allow students to change roles.

The role of the instructor or trainer is to facilitate the activity with prompts, hints, ideas, additional Web resources, and personal opinions. Perhaps near the end of the activity, you could ask students to explain how their personal views differ from those of the individual they were assigned.

Variations and Extensions. If an online séance is deemed too risky, you could refer to it as a roundtable activity, akin to King Arthur's Knights of the Round Table. As with King Arthur's knights, everyone would have equal status at the roundtable. In taking advantage of such equal status, each assigned knight at the table could represent a different person in your field. In addition to the discussion of some prearranged topic or event from that perspective, other course issues, disputes, and ideas could be brought up in a roundtable type of meeting.

Key Instructional Considerations

Risk index: High
Time index: Medium
Cost index: Low
Learner-centered index: High
Duration of the learning activity: 1–2 weeks

Activity 32. Virtual World Role Plays

Description and Purpose of Activity. One current trend in education is the use of fantasy worlds for reenactments of historical events, decisions, and problem-solving situations.

When engaged in such activities, students can understand the complexity of issues and problems within a topic or field of study. They might also feel empathy for those less fortunate or who have been portrayed unfairly or negatively in the press. At the same time, these fantasy worlds can help students reflect on the interconnectedness of ideas.

For instance, in April 2011, Dr. Monica Rankin's History 4359 course on "The Cuban Revolution" at the University of Texas at Dallas engaged in a role activity in Second Life. One group role-played scenes from the 1960s in Cuba involving Fidel Castro (the event was titled "Castro Salvado"). Some of Rankin's students were assigned to be sympathetic to Castro. They portrayed Castro, members of his military, and his Soviet collaborators. Questions were related to various charges made against the revolutionary government of Castro and measures to defend what they have done. Students also pondered the response from the United States should Cuba and the Soviet Union form an alliance.

During this role play, students had to reflect on differences between the culture and history of Cuba and those of the Soviet Union. In effect, they had to put themselves in Castro's shoes as well as the people of Cuba. Personal beliefs about Cuba, Castro, and the United States could, at least in part, be separated from what really happened.

While that was transpiring, a second group role-played "No Country for Old Castro," in which President Barack Obama is perplexed by his low approval ratings as "hope" and "change" had not worked. His administrative assistant suggests that he "could always find a way to kill Castro." Former presidents such as Kennedy, Carter, Reagan, and Clinton soon separately enter a dream Obama has wherein he asks them for their advice. He then hears what happened under each of their watches regarding Castro.

To be successful in their performance in Second Life, students in Rankin's class had to dig deep into the literature. Students even used the accents of the people that they portrayed. As a means to scale up the project and support others, each of the Second Life scenarios was captured and made into a YouTube video. Dr. Rankin's reflections in YouTube indicate that student creativity, engagement, and freedom to explore ideas were among her chief course goals. Also important to Rankin was seeing key historical issues from other points of view.

This is a prime example of how technology can foster respect and understanding of multicultural points of view (Rasmussen, Nichols, & Ferguson, 2006). Real-world content can be experienced in innovative ways with such technology. Students are in the driver's seat. Of course, instructor support and peer interaction, conversation, and collaboration are vital.

There are many other ways in which Second Life can be used in education (Atkinson, 2008). For instance, online court forums can be held when real-life ones are unavailable. Students can tour virtual art galleries; explore discoveries and inventions in history; make patient diagnoses in a health care setting; explore ancient worlds (e.g., the Forbidden City in China), experience a tornado, earthquake, or tsunami; and learn about the solar system through three-dimensional environments (Park & Baek, 2010). Want more? Megan Conklin details more than a hundred uses of Second Life (Conklin, 2007).

Skills and Objectives. Includes appreciation of multiple perspectives, learning by doing, connecting content knowledge from books and lectures to the real world, and fantasy. A key goal of such an activity is to push students' thinking beyond their preexisting viewpoints and biases.

Advice and Ideas. This is a high-risk activity which typically requires much time to create and implement. Not many instructors are willing to allot class time for virtual worlds, games, or fantasy activities. Warn students that it may not work as planned. Talk to colleagues about what has worked for them. Evaluate each activity immediately after it occurs. And share the results.

Variations and Extensions. Ask students for suggestions for follow-up activities on the method or script. Perhaps even allow students to create the script or scenario. You might even place them in charge of production.

Key Instructional Considerations

Risk index: High
Time index: Medium to High
Cost index: Low (if using a free system)
Learner-centered index: High
Duration of the learning activity: 2–4 weeks

Activity 33. Mobile and Social Networking Content Games and Apps

Description and Purpose of Activity. As with the online séance, roundtable, and virtual world role plays in systems such as Second Life, games and simulations offer a chance for students to take on different personas and enter fantasy worlds. Of course, they also are flavored with fun and highly novel learning experiences or problems to solve. For many years now, students have played games online as a means to review and apply content learned. There are games for basic and advanced accounting principles (e.g., *Bean Counter Free Accounting, Bookkeeping Tutorials,* and *Biz/Ed Virtual Worlds*; see Anderberg, 2010), civics issues (e.g., *iCivics*), and public health crises (e.g., the *Point of Dispensing [POD]* game). In *iCivics,* for instance, students learn how different types of taxes, tax rates, entitlements, and cost decisions affect the federal budget. While engaged in such an activity, students are learning critical thinking skills including finding and evaluating available evidence, identifying reasons and rationales, analyzing trends, crafting arguments, and comparing and contrasting information provided. Former United States Supreme Court Justice Sandra Day O'Connor was involved in part of this civics literacy and education project in an attempt to prepare the citizens of tomorrow to better understand and form their own arguments around pressing issues.

In recent years, massive multiplayer online games (MMOGs) like *FarmVille* have become popular on social networking sites like Facebook and on mobile devices (Schroeder, 2010). Rather than the violence found in games like *Grand Theft Auto, Halo, Mafia Wars,* and *World of Warcraft,* in *FarmVille* users learn the ins and outs of managing a farm. They plow land, grow and then harvest their crops, plant bushes and trees, and raise pigs and cows. To get started, each player must create an avatar which is customizable and changeable. In *FarmVille*, the player progresses through different levels of farming expertise. Their level of play is indicated by different experience point (XP) levels. XP points are earned through such activities as harvesting crops and visiting neighbors (FarmVille, 2011).

There are many other types of mobile games online for learning languages, grammar, math facts, the laws of physics, geography, and so on. Mobile learning is turning smartphones, iPads, and other devices into multimedia study guides and reviews. However, their power extends far beyond simple flashcard technology. When needed, students can access video and audio clips as well as other interactive features.

Most such mobile games are content specific. For basic mathematics, there are dozens of drill games (e.g., *Math Drill* from Instant Interactive) that can be downloaded from Apple's iTunes store and used with the iPhone, iTouch, and iPad (eSchool News Staff, 2011). In spelling, there are applications for the iPad like *Miss Spell's Class*. This tool offers a series of ever more challenging vocabulary words and forces students to decide if a word is spelled correctly or not. In addition, dozens of mobile dictionaries and language games can be used at the K–12 and college levels.

Professional fields like medicine, engineering, and business have increasingly incorporated mobile study aids and games. Peter H. Abrahams from the University of Warwick in the United Kingdom, for instance, has designed a series of nearly forty short films as well as a reference manual for his clinical anatomy classes that work on the iPhone (Young, 2011). In these mobile videos, different scenarios and problems are presented (e.g., trouble with the cardiopulmonary plexus, the arch of the aorta, and so on). After viewing the scenario, students must answer quiz questions about this situation including naming the relevant body parts.

Abilene Christian University (ACU) has embraced a campuswide adoption of the iPhone since it first came out (Abilene Christian University, 2008). In March 2011, Stephen Baldridge, an assistant professor of social work at ACU, had students use their phones in a campus scavenger hunt based on the TV reality show *The Amazing Race* (Young, 2011). In his cleverly designed *Amazing Nonprofit Race*, Baldridge had his students find service-related organizations on the ACU campus. His role was that of a guide who built clues into the system that could be accessed during their exploration.

These are but a few of the social networking games and mobile apps available today. The coming decade will see an explosion of apps for education. Most tasks and activities previously conducted in lecture-based classrooms will be eventually supplemented, extended, augmented, or repeated using mobile technology. As this occurs, our mobile lives will become our learning lives, and vice versa.

Skills and Objectives. Includes learner engagement, comprehension and application skills, practice, problem solving, trial and error testing, and identification of key concepts and terms. A key goal of such an activity is to allow learners to practice their skills wherever they are in the world, at any time, and receive feedback on it.

Advice and Ideas. Determine whether there are mobile games related to your content or discipline. You could do this by conducting literature reviews, talking to colleagues, keeping up with the news, attending conferences on gaming or technology in education, or exploring open educational resource portals such as MERLOT and Connexions, mentioned earlier. You might recruit colleagues to test a new simulation in related courses or different sections of the same course. And when done, conduct reflection and debriefing activities.

Online simulations and games often require special hardware and software to access or use. Test the technology. Perhaps watch students as they use it and see if they are

encountering any problems. Ask students if they have the necessary technology or backgrounds to use a particular simulation or mobile application. If they do not, consider making the use of that particular mobile application optional. Be sure to create online and offline guidelines and job aids for any learning activity involving such technology. Monitor the activity as much as possible.

Variations and Extensions. Assign reflection papers on what students have learned from the activity. They might reflect on their planning and decision-making processes while playing the game. In fact, each game could have a checklist of skills for learners to reflect on. A further extension of this assignment would be for students to think aloud while playing the game for 5–10 minutes and record their thoughts for later personal review and retrospective analyses. Papers could be exchanged with peers who would read and comment on those reflections.

Key Instructional Considerations

Risk index: Medium to High (the risk index will lower in the coming decade)
Time index: Medium to High
Cost index: Low (if using a free system)
Learner-centered index: High
Duration of the learning activity: 2–4 weeks or as needed

Activity 34. Educational Music Videos

Description and Purpose of Activity. One way to add some novelty, fun, and variety to a course is to link the content to memorable and relevant resources. For instance, events in history or literature can be summarized and presented in the format of poems, sonnets, songs, mottos, hymns, tales, stories, and adventures. Such approaches are powerful and exciting given the capability of humans to remember stories and anecdotes more readily than facts (Driscoll, 2005; Goldsmith, Kaye, & Shelton, 2000).

For an extremely novel and engaging example, take a look at one or more videos at the "History for Music Lovers" channel in YouTube. This site offers a series of videos based on popular songs from the past few decades rewritten and remixed to detail important moments or people in history. The brains behind this highly creative channel are Amy Burvall of the Le Jardin Academy in Kailua, Oahu, and her colleague Herb Mahelona, choir director at the Kamehameha Schools Hawaii Campus (Strauss, 2010). Each of their videos is witty, entertaining, and covers a wide range of historical content. In addition to being a high school history teacher, Burvall is quite the performer and musical artist. In fact, she has written lyrics for more than fifty music history videos including Elizabeth I ("She's Not There" by the Zombies), Charlemagne ("Call Me" by Blondie), The French Revolution ("Bad Romance" by Lady Gaga), and the Trojan War ("Tainted Love" by Soft Cell). Those watching the last one will hear words such as:

In Homer's Epic Tale of
Ancient Greece in order to
Make some peace at a wedding
The handsome Paris had to make a choice
Who was most fair
Of all the goddesses there . . .

As in this example, many historical facts and sequences are embedded in each video. Equally important, each video is filled with creative expression. Comments on Burvall and Mahelona's YouTube channel indicate that many people are addicted to their videos and want to purchase their music. Watch any one of them and you will immediately understand why. Although designed for 15-year-olds, there are many college professors and adult educators using them (Strauss, 2010).

Skills and Objectives. Includes creative expression, design, planning and coordination skills, content review, and linking course content to multimedia resources (e.g., visuals, audio files, and animations). This type of activity helps students learn factual knowledge as well as higher-order thinking skills.

Advice and Ideas. Similar videos exist for other content areas including science music videos explaining topics like DNA, the Periodic Table of Elements, and Space Junk (Rowe, 2009). Many are highly popular. In fact, nearly 3 million people have watched the Hui Zheng lab at Baylor College of Medicine, which studies Alzheimer's disease, parody Lady Gaga's "Bad Romance" with their science research twist called "Bad Project." Like those found at the "History for Music Lovers" channel, these science videos are funny, catchy, and informative. Take an hour to explore the Web and you will likely find one or more useful videos that can inform as well as entertain your students in new and imaginative ways.

If you do not discover any, however, consider creating one or more on your own. The act of creating something new is personally empowering. At the same time, keep in mind that it can take extensive planning and development time. For high-quality contents, the cost of production may be prohibitive. When done, consider contributing your musical creations and other productions to the world community at such sites as Creative Commons, Curriki, or MERLOT. If applicable, obtain permission from sponsors. Sharing online resources will save others time and money. In addition, you might advertise these resources through your homepage, blog, Twitter account, online communities, and other such places.

Variations and Extensions. As discussed in many other activities described in this book, students could design and write the lyrics, poems, or videos. If you take that route, you could arrange an end-of-course competition for the most creative or useful product. Another idea would be to curate and perhaps extend existing musical resources found online that relate to your domain. You and your class could index, categorize, rate, and share them.

Key Instructional Considerations

Risk index: High
Time index: High
Cost index: Low to High (low to watch, medium or high to develop)
Learner-centered index: Medium
Duration of the learning activity: As needed

Activity 35. Database Problems and Search Competitions

Description and Purpose of Activity. One activity that is fun for many people is to search the Web for information. In formal educational settings, information search competitions could be intended to test student search skills or problem-solving abilities. There are many databases now for students to practice their skills. The instructor could create an asynchronous activity akin to an online scavenger hunt, but instead of testing student search and access skills for a wide variety of online contents and resources related to the course, such an activity would test student skills within just one Web resource or tool. For example, you could have students search for factual answers in Wolfram Alpha, a highly innovative and comprehensive online answer engine for search queries. Some examples are below.

- In an algebra course, students might be given a particular mathematical equation. Next, they might be asked to use Wolfram Alpha to find alternative forms of that equation, derivatives, and the type of geometric figure that it represents. Students could work on a series of such problems.
- Instructors in educational leadership courses could assign one group of students to find comparison data on universities such as Harvard University and the University of Houston, including date founded, tuition, population of the city it is located in, number of undergraduate and graduate students, and so on. Instructors could have a second group get ACT scores in a state like New Mexico, and ask them to follow up with probes about the population, land area, water area, housing units, poverty rate, and mean household income in New Mexico.
- In a finance class, students could analyze stocks and mutual funds using Wolfram Alpha. For instance, they might quickly determine the market cap for automobile stocks like Ford, Tesla, and Hyundai. They could also gather their prices on different dates in history, find data in analyst reports, and compare different stock ratings.
- Students in a course on nutrition, fitness, public health, or biology could access the food and nutrition area in Wolfram Alpha. Once there, they could gather information such as the calories of a breakfast meal of orange juice, a banana, a cup of coffee, and a bowl of cornflakes.

If you have done all of these activities, you will likely say to yourself that Wolfram Alpha is an amazing resource. Look again—there is so much more to explore. Topics within Wolfram Alpha include particle physics, electrical engineering, geology, weather, airplane flight data, diseases, mortality rates, political leaders, mountains, time zones, and much more. You should be cautious, however, as the answers it provides are not always correct. Bonk once typed in the question, "Who did North Korea defeat to get into the 2010 Men's World Cup tournament in South Africa?" and the response he received was about the current weather in North Korea.

Instructors can use this database and others as a way to start a class and prime student knowledge. In a live class or Webinar, they could pick a topic and arrange 5–10 questions

for students to quickly look up. They might also post a few starter questions each week or each day to an asynchronous forum thread where students can submit responses, perhaps awarding a bonus point to the first one with the correct answer each week. Creative instructors could randomly post such questions at different times each week as a means to get their students to check in on the class.

Of course, there are many other types of online databases besides Wolfram Alpha. A second example is the Worldmapper tool. It allows users to access data such as pancreatic cancer deaths, primary school spending, adult literacy, sanitation, and infant mortality rates and then display it on a map of the world. Those countries or regions of the world with higher numbers or percentages of a certain variable or item (e.g., traffic fatalities) are displayed as fatter or bulkier. Countries or regions with lower amounts are smaller or skinnier. The Worldmapper is a fascinating database for learners to manipulate and begin to understand vital data on health, education, housing, fuel, manufacturing, disease, and so on. For instance, a visual portrayal related to infant mortality (i.e., babies who die during the first year of life) shows India and many parts of Africa as larger than their true size, whereas Canada, the United States, and much of Europe and South America appear to be quite tiny in comparison to their actual size. Pollution, income, fuel, education, and other related types of data searches will reveal world maps of very different compositions.

Students in a sociology course, for instance, could be asked to locate the countries in the world with the lowest and highest rates of literacy. After that, their assignment could be to determine the countries with the highest rates of polio or malaria, enrollment in primary education, percentage of territory with rain forests, sewage sludge, or carbon emissions. In contrast, a graduate course on qualitative research might start with such visual data and then engage students in search activities from oral history databases as a way of personalizing it (Wolverton, 2011). Next, these students could compete to find different quotations, comments, or themes from those databases. The instructional possibilities are endless.

Skills and Objectives. Includes information access, search, evaluating the credibility of sources, comparison and contrast, and communication skills. While most such competitions focus on basic facts, the ability to display trends as well as to compare and contrast data with tools like Wolfram Alpha and the Worldmapper indicates that higher-order thinking skills are also involved.

Advice and Ideas. One of the issues for instructors to consider is teaching students effective search strategies for a particular program. Screencasting tools, mentioned earlier, allow instructors to create effective tutorial or help systems.

Keep in mind that this type of activity can quickly become routinized and lose its luster. To avoid this turning into a monotonous weekly requirement, create a unique game, perhaps with a game show host, name, and set of rules. Winners (i.e., those with the most correct answers each week) can accumulate points for increasingly higher-level competitions. Weekly competitions might lead to an event at the end of the course or semester. To further arouse student interest, consider including some items from these database competitions on course quizzes and examinations.

Variations and Extensions. Students could take turns in creating the weekly questions or information items to explore. They could also find new databases to mine as well as set

up or change the rules for their own search competition game. Team competitions are another option.

Key Instructional Considerations

Risk index: Low to Medium
Time index: Low
Cost index: Low
Learner-centered index: Medium
Duration of the learning activity: As needed

Activity 36. Task and Activity Randomizer

Description and Purpose of Activity. Some instructors try to avoid ruts in their courses by allowing students to vote on the type or order of activities for a week or unit. Sometimes they give learners alternative formats to select from. Instructors may also randomly go through the activities that they planned or, better still, rearrange them in reverse order. We find that such randomness keeps our courses and our delivery fresh and alive. In addition, there may be holes or open weeks in the syllabus which have no preplanning. Such weeks add to the variety, suspense, and spontaneity felt within the course.

Changes to the routine are especially important in online courses. It breaks students from the excessive monotony or repetition seen in F2F courses. Today there are dozens of online tools to help randomize events. There are random number generators, coin flippers, dice, playing card shufflers, clock time generators, integer sequence generators, string generators, research subject randomizers, and so on. If you had 12 items listed for an online class meeting, you could use an online pair of dice to pick the number of the task or activity to start with. Alternatively, you might use a random sequence generator and put in a minimum of 1 and a maximum of 12 and have the tool randomly select the order of activities for the entire class session. This same tool can be utilized to select the order of student presentations.

Skills and Objectives. Includes variety, flexibility, creative expression, freedom to explore, freshness, and tolerance for ambiguity. With such an approach, there is a sense of unknown and the spark of spontaneity.

Advice and Ideas. The tools for random course events are available for F2F, blended, and online instructors. Be sure to check that the randomizing tool you are using suits your needs and is still active. Such tools often change. There are many such tools listed in the resources section related to this chapter. In addition to the options listed, you should conduct a quick search of the Web for other tools and resources that may more directly relate to your content area.

These tools can add a spark of excitement and fun to a course. If your students are complaining about the lack of variety, try one out in a small pilot experiment and see how it works. Afterward, collect feedback from your students. You may even become bold enough to randomize the entire course sequence. Of course, randomness might soon run through your veins, allowing you to discard such online tools and rely solely on your intuition and judgment.

Variations and Extensions. We have a lateness policy where students are always allowed 24 hours extra for any assignment as long as they do not abuse the policy. You could use the randomizer to determine how many hours late you will accept an assignment (e.g., from zero to 48 or more). To pique student interest, instructors could announce the day and time when they will spin or use the randomizer. Alternatively, they might select a random type of class event early in the course. Later on, instructors could allow students to suggest other ways to use the randomizer. Students could come up with ingenious ideas on how the class format, activities, and events might be made more motivational.

Key Instructional Considerations

Risk index: Medium
Time index: Low to Medium
Cost index: Low
Learner-centered index: Medium
Duration of the learning activity: As needed

Activity 37. Time-Constrained Presentations

Description and Purpose of Activity. Akin to the course randomizer detailed in Activity 36, one activity that we use to bring a diversity of perspectives and more spirited participation in our courses is the use of timed activities. There are different types of technology tools that you can use for both synchronous and F2F class events. For instance, there are 99-second timers as well as those you can set for any length of time. Such tools might display as stop watches or countdown timers; some of the latter appear as bombs with a long fuse that explodes when you run out of time.

In such an activity, you force students to make a statement or set of statements within an allotted time period. For instance, you might give students 99 seconds to summarize the readings for the week. Alternatively, they could be asked to bring one or more quotations from the readings and explain, in the specified amount of time, why they selected those particular sections as important to their learning. Once the clock expires, so too does their moment of fame and attention turns to the next person.

This kind of timed activity forces students to reflect on the truly important content as well as how to present it to others. Simultaneously, it encourages students to voice their ideas and opinions, instead of listening solely to the instructor. Each student is granted a platform on which to speak, effectively shifting learning from instructor-centeredness to learner-centeredness. And although the activity is highly structured in terms of time, it is open-ended in terms of everything else.

Skills and Objectives. Includes planning, rehearsal, information summarization and distillation, comprehension skills, engagement, and communication. The key aspect of this activity is condensing information into a useful summary for both yourself and others.

Advice and Ideas. For those of you who do not think this strategy will work with adults, our friend Dr. Sivasailam "Thiagi" Thiagarajan uses timers in many of his online and live courses and workshops with clients such as AT&T, Chevron, IBM, Intel, and United Airlines. He also uses the 99-second activity at conferences. We have seen him bring in 20–30 of the most famous people in the fields of performance technology and instruc-

tional design to preconference symposia, workshops, and institutes and then give them each just 99 seconds to make a point. Each person is allowed to present on anything; however, when the 99 seconds are up, Thiagi politely yanks them off the stage. It is one of the most informative and entertaining methods we have ever seen. And all it takes in terms of technology is an extremely minor piece of software that you can find online for free. To boost the fun and intensity of the timer activity, instructors could create incentives or competitions within the timed activities.

Variations and Extensions. There are hundreds of uses for timers, including group or team situations, online panel presentations, or online symposia. A virtual conference conducted with class members and outside guests could have set starting and ending times for each presentation or panel.

Key Instructional Considerations

Risk index: Medium
Time index: Medium
Cost index: Low (unless you want to purchase something highly sophisticated)
Learner-centered index: High
Duration of the learning activity: As needed

Activity 38. Virtual Community Brainstorming

Description and Purpose of Activity. A sense of déjà vu caused by instructional repetitions or redundant activities gets old quickly. Online instructors can rely on brainstorming to inject new life into an otherwise dull experience. When teaching online, such brainstorming can happen in a discussion forum, wiki, chat, or Twitter feed, to name a few. Many interactive learning technologies can be used to spark a new idea and resuscitate a course.

Brainstorming and idea generation activities start with nothing. All lists are blank. Students are asked to respond to a comment, question, goal, or event. They can piggyback on ideas that are generated; however, they are not allowed to evaluate or rank them. Working in this type of an environment, they can say what is on their minds without having to back up their claims, demonstrate the practicality of an idea, or worry too much about fellow students' laughter. There is less pressure to perform and fewer embarrassments. Such an open approach frees up mental energy.

As indicated, students can make their suggestions to a course wiki or within a live chat session window. They could also type messages to a class Twitter account to which fellow students have subscribed. Other such microblogging tools include Plurk and identi.ca. If, however, you want privacy and a system where teams can post to other team members in a group communication hub, you might try GroupTweet. A group account in GroupTweet receives direct messages from group members. Those in the K–12 space might consider Edmodo, a private online social platform. With Edmodo students and teachers can share files, links, ideas, events, and assignments.

Much is possible with microblogging technology. Tools like Twitter are well suited for sharing short inspirational moments and ideas. Anything that pops into your head can be immediately typed and shared. As a public notepad, it is ideal for creative expression

(Parry, 2008). The same might be said about wiki-like collaborative tools like PiratePad and MeetingWords. Both are open environments allowing anyone to participate with contributions marked in different colors. Changes to a document or a list of ideas are immediately displayed on all screens. If you prefer visual brainstorming, a relatively new tool we are experimenting with from the LT Media Lab at the University of Minnesota is called Flipgrid. With Flipgrid, you can post a question, issue, or comment in video format for others to respond to. In contrast to asynchronous discussion forums, when you include video and audio, you will elicit responses that are often more sincere, thoughtful, and connected.

Skills and Objectives. Includes excitement and enthusiasm for learning, fun and suspense, creative expression, class diversity, student voice, and engagement. Such an activity is well aligned with the rapid-fire approach to learning to which young people are accustomed.

Advice and Ideas. This may be a totally novel activity for the class. If it is, create an instructional scaffold for your students. In the job aid or guide sheet, lay out your expectations in terms of the timing of the posts, post length, and kinds of ideas that are acceptable or unacceptable. If you are using Twitter, create a class account for students to send their tweets. You might also provide tips on how to create hashtags (the "#" symbol) to help categorize their posts. Similar advice applies to the use of wikis. Whatever technology or system that is ultimately selected, be sure to run a pilot of the activity, especially if there will be points assigned for completing the task.

Once ideas begin to accumulate, consider expanding the activity with some type of discussion of the suggested ideas where students can elaborate and combine ideas. In addition, they may vote on which ones are the best, the most practical, or the most unique, with the instructor sharing his votes and opinions as well. If you are using Twitter or some other microblogging technology, you can track conversations among students (i.e., the "backchannel") outside of the main course Twitter feed (Reinhardt, Ebner, Beham, & Costa, 2009). As will be discussed in Chapter Ten, in the backchannel there is intense interactivity, near-instant feedback, and currency to the information shared.

Variations and Extensions. Consider empowering each student once during the course with selecting the brainstorming topic of the week. You could also start creative expression competitions between groups in the class or between classes around the world, with the student, group, or class posting the best or most ideas receiving public recognition. You could also create a Twitter or wiki activity hall of fame wall or list.

Key Instructional Considerations

Risk index: Medium
Time index: Low to Medium
Cost index: Low
Learner-centered index: High
Duration of the learning activity: As needed

Activity 39. Extreme Teaching and Online Mentoring

Description and Purpose of Activity. In the previous chapter, we discussed extreme learning. Now we shift gears to "Extreme Teaching," or teaching with technology in new or unusual ways, in addition to other forms of volunteer teaching or mentoring situations online. There are a growing number of extreme teaching situations that students can be engaged in to use or extend the knowledge that they are learning in your course. When a student is the teacher, he will most certainly learn the material better. Such an approach is especially pertinent in teacher training, though it has benefits in nearly any field or discipline. When the learners take over all or a portion of an instructional situation, they are empowered.

As an example, adults could use a Webcam to mentor children in South Africa whose families have been affected by HIV/AIDS (Berger, 2011). In one such project from Infinite Family, hundreds of South African teens have been connected to volunteer mentors from around the world. Such services are crucial given that over 15 million children in Sub-Saharan Africa are orphaned due to HIV/AIDS. These "Web Buddies" help provide role models as well as valued educational services and support.

Other forms of extreme teaching or volunteer mentoring include signing up to teach a language at Mixxer or Livemocha. Someone might also lead a discussion wherein users practice a new language such as French, Spanish, or English in threaded audio discussions with people around the world in Voxopop. Students could broadcast a weekly webcast or podcast production on a special topic such as seen at EdTech Talk. In each situation, the learner is helping others to learn something or gain new skills. Such online teaching or mentoring can remain local with fellow students or expand to a global stage. As with any teaching professional, if your students are involved in online teaching or mentoring, they should have opportunities to reflect on how well it went and what they might change next time.

Skills and Objectives. Includes content preparation, interaction, communication skills, content delivery, support skills, and leadership. Assuming the role of teacher is courageous and fosters a sense of responsibility and caring for the learning of others.

Advice and Ideas. Teaching and mentoring elevates the students in your class to one of the highest levels of human expression. Provide them with instructional support and advice to help in their successes. When issues that concern them arise, be available for support. And reward students when they take initiative to help in the lives of others. Such rewards might be explicit recognition, bonus points, or recommendation letters. We often allow students to replace an assignment with their online mentoring or teaching if they include a short reflection paper on the experience. Of course, the reward or incentive for such a task can also be more implicit in nature.

Variations and Extensions. Students could work in pairs to collaboratively teach or mentor online. Each team could then write one or more reflection papers based on their experience.

Key Instructional Considerations

Risk index: High
Time index: Medium to High
Cost index: Low to Medium
Learner-centered index: High
Duration of the learning activity: As needed

Activity 40. Exploring Dynamic Web Content

Description and Purpose of Activity. Content changes fast in many fields. One way to encourage variety or novelty as well as add a bit of fun to a class is to have your learners explore the most recent online resources, posts, comments, and so on. Alternatively, you could have them look for the most viewed, debated, or shared resources. Here are some examples of what is possible.

- Suppose you were teaching a course on computer programming, business management, or the entertainment industry. You could assign your students to read the highest-rated news items for that day in Digg, Reddit, Drudge Report, Fark, and Slashdot, and then write a reflection paper or some type of summary on what they learned. Sites like Slashdot and Digg are Web aggregation and social news websites where users vote on the news, up or down, and even submit original content. Drudge Report, on the other hand, consists of links to stories from mainstream media related to politics, entertainment, and current events, and could be useful in political science, law, sociology, policy studies, venture capital markets, and American government classes.
- Instructors might require students to subscribe to StumbleUpon and enter a few topics of interest to them related to their course. In a course on "East Asian Religious Thought and Culture," for instance, students might enter topics of interest such as Buddhism, Taoism, and reincarnation. They might hit the "Stumble" button and see what news articles or Web resources on those topics float to the top for them to read.
- In a course on pop culture or new media, students can be asked to click the public timeline for posts on Twitter or identi.ca. The instructor could ask them to click it at least fifty times during an hour and to record or capture what people are currently microblogging about. A public timeline provides a highly dynamic and varied record of what is of interest to people around the globe. International students might especially appreciate posts in their native language.

These are but three examples. There are myriad random Web explorations possible with online portals of famous people in your field as well as from lectures found in Academic Earth from award-winning professors, new talks posted to iTunes University or YouTube EDU, and so on. In each case, students will be confronting content that was previously unknown and often in the midst of transformation.

Skills and Objectives. Includes extending beyond standard course content, connecting course material to current events in the news, discovering new trends, seeing rela-

tionships, learner curiosity in new content, exposure to fresh and novel material, and excitement for the topic. This activity helps the learner perceive the connectedness of concepts and ideas.

Advice and Ideas. Although this task would be fun for students, it could also be highly confusing. Be clear on your expectations in terms of the amount and timing of student searches as well as any reporting back of their explorations. Examples or testimonials from previous semesters or course experiences would undoubtedly prove beneficial.

In setting up the task, randomly assign students a database, portal, or website to explore. One student could be assigned to Twitter for the week, another to YouTube EDU, still another to Wikinews, and so on. They would track how their site changed or evolved during that week in terms of the class or a particular topic within it and report back to the entire class. Such reporting can be in the form of an online discussion, webinar, chat, or class wiki; when done, have students write a reflection paper on what they found.

Variations and Extensions. Students could work in pairs or teams on such a task. Each observation might then build on the other and result in a deeper and more informative report. Another idea would be to have their random exploration of Web content merge together into a class technical report that is made freely available to the world community. This activity could evolve into their joint statement on what was happening on this date in history.

Key Instructional Considerations

Risk index: Medium
Time index: Medium
Cost index: Low
Learner-centered index: High
Duration of the learning activity: 1 week or as needed

Final Reflections on Variety

Much variety is possible with the Web. As a result, it is truly an adventure to teach as well as learn online. Variety is the core or focal point of the TEC-VARIETY model. What is considered variety today, however, quickly becomes commonplace tomorrow; it is a constantly moving target. And if online instructors repeatedly select particular tasks, students may no longer consider that activity as novel or engaging as it once was.

Some readers of this book may have already tried a Second Life simulation, an online séance of long since departed founders of your field, or a mobile game. If so, you are taking bold steps to shift the balance of power in the teaching-learning equation toward your learners. Such risk takers allow students opportunities to teach or mentor others in the course as well as generate knowledge for the next class. Risk-taking instructors may also leave gaps or spaces in the syllabus or course schedule for their students to fill in.

This chapter not only emphasizes variety but also ideas related to fun, fantasy, and novelty. Considering the generation of learners brought up in the age of the Internet, Principle #4 might be one that they appreciate more than most. How will you convey notions of fun and fantasy in an online class? Will you ban joking from your online discussion

forums? We have seen some instructors in the early days of Web-based instruction do just that. What about novelty? Will you be allergic to testing out emerging technology tools or resources when they are announced? Is your risk muscle well developed? Or will you be among those who stay with practices that are tried and true? If so, no variety for you then! Move on to one of the other nine principles.

You must be starting to realize that teaching and learning online, be it in a blended or a fully online mode, is not the same as F2F courses and experiences. Sure, many of the 100+ activities outlined in this book will work in F2F settings. Nevertheless, how each one is implemented and evaluated is vastly different when teaching online.

When you use the TEC-VARIETY framework, variety will be jumping out at your every turn. You will undoubtedly develop your own notions of what variety means to you and your students. When you do, share your ideas, results, and insights with others. The variety you seek might be personal so as to avoid boredom and burnout. It may also be variety for the learners in your online courses but not for others.

The next principle of the framework moves us into the section that more directly emphasizes the learner part of the equation. The watchword of the next chapter is autonomy. As we stated with the first principle of TEC-VARIETY, learners should have freedom to learn. They should control their learning destinies. Choice, control, flexibility, and opportunities are part of that fifth principle. And these are often the very principles that many educators argue are the key advantages of online learning. No matter the delivery mechanism, a learning environment filled with autonomy and ample choice is central to learning success today. Of course, you now have a choice of whether or not to proceed to the next chapter. We certainly hope that you will.

Praise for *Adding Some TEC-VARIETY*

"There are books on theory and books on practice, however this is the best volume ever written for using learning theory to inform effective practice. This book is a tour de force for creating an environment where students not only succeed in online learning, but they achieve excellence as well."

—**Charles (Chuck) Dziuban,** Director, Research Initiative for Teaching Effectiveness (RITE), Professor Emeritus and Inaugural Pegasus Professor, University of Central Florida, and Sloan-C Fellow

"An excellent book from world leaders in the field that will be of great value for educators and designers. Presents concrete examples grounded in solid 'practical' theory."

—**Charalambos Vrasidas,** Executive Director of the Center for the Advancement of Research & Development in Educational Technology (CARDET), Associate Dean for elearning, University of Nicosia, Cyprus, and author of several information technology and distance learning books

Based on 10 theoretically driven and proven motivational principles, *Adding Some TEC-VARIETY* offers 100 practical yet innovative ideas to motivate online learners and increase learner retention.

What motivates?

1. **T**one/Climate: Psychological Safety, Comfort, Sense of Belonging
2. **E**ncouragement: Feedback, Responsiveness, Praise, Supports
3. **C**uriosity: Surprise, Intrigue, Unknowns
4. **V**ariety: Novelty, Fun, Fantasy
5. **A**utonomy: Choice, Control, Flexibility, Opportunities
6. **R**elevance: Meaningful, Authentic, Interesting
7. **I**nteractivity: Collaborative, Team-Based, Community
8. **E**ngagement: Effort, Involvement, Investment
9. **T**ension: Challenge, Dissonance, Controversy
10. **Y**ielding Products: Goal Driven, Purposeful Vision, Ownership

This is the book you need to grow your online teaching repertoire in innovative ways that will grab your students' attention and imagination. **Additional book resources as well as a free e-book are available for download at http://tec-variety.com.**

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