

# ADDING SOME TEC-VARIETY TO ONLINE COURSES

BY CURTIS J. BONK

For the past two decades, the Web has brought wave after wave of innovative technologies for delivering learning, as well as an abundance of online resources to enhance, extend, and transform it.

For the past two decades, the Web has brought wave after wave of innovative technologies for delivering learning, as well as an abundance of online resources to enhance, extend, and transform it. Along with this proliferation of learning technologies and resources have come new ideas related to formal, as well as informal, education. Although online learning did exist prior to the advent of the Web, it had become a noticeable part of the lexicon of every higher education administrator and faculty member by the late 1990s. Looking back, 1999 was the bellwether year for online learning. Even today, many bar charts and line graphs of online enrollments for a particular university or state system still use that year as the starting point

for summaries of the growth of online learning for their institution. As this happened, questions were raised about quality, copyright, assessment, plagiarism, faculty training, and recognition. Among the most salient concerns, however, were those related to student retention and motivation. Boring content, often nicknamed as “shovelware”, was pervasive, as many faculty members and instructional designers simply repurposed existing courses and ported them to the Web.

By the turn the millennium, options emerged that were less drastic than placing an entire course on the Web. At that time, ideas related to mixed, hybrid, or blended learning took center stage. A blended approach offered





hope of increasing student success and satisfaction. College faculty members who had been resisting fully-online learning because of its novelty, or due to the lack of personal interactions with students, could see themselves adding online components to their face-to-face (FTF) courses, including online study materials, tests, guest expert webinars, or discussion forums. To them, this was blended learning. Despite the widespread acceptance of blended forms of learning across educational sectors, teaching in a blended environment was not particularly easy; and instructors in such environments were not shy about their need for assistance and support for their efforts. Some campuses (e.g., UCLA) even experienced faculty and student protests related to simple blended learning, such as requiring a syllabus to be placed online (Young 1997, 1998).

For some on the front lines of fully-online learning, blended learning was a step backwards. There was much less of an educational transformation or renaissance when in a blended environment than when learning fully online and never stepping into a school, university campus, or other physical educational space. Instead, blended learning offered supplements and add-ons to an eyeball-to-eyeball or lecture-based instructional approach that had been used for centuries.

For others, blended learning was a step forward in recognizing that the most effective forms of learning were ones that built a comprehensive learning environment. An effective learning environment might combine an assortment of pedagogical activities and interactive technologies. Some experiences might be FTF, or, at the very least, synchronous, while others might alter the typical time and place constraints of on-ground instruction, and allow learners to asynchronously participate in their online courses. Eyeball-to-eyeball learning requirements gave way to anywhere, anytime, learning. Anyone could now learn anything from anyone else at any time (Bonk, 2009).

Today, online learning is hitting fever pitch in the form of massive open online courses, or MOOCs. Premier universities around the globe are offering free classes to tens or even hundreds of thousands of learners in a single class, and for free. However, the vast majority of those enrolled are window shopping, and not sticking around for the in-depth learning activities required for course completion. Once again, questions are arising related to learner motivation and retention.

What is interesting is that despite the numerous problems and issues raised by educators, and reported in the media for more than a decade, blended learning, fully-online learning, and





MOOCs are seen as potentially disruptive to traditional classroom-based learning approaches. Budget cuts, high unemployment, and the escalating cost of education have added to the excitement placed in these emerging forms of disruption. Nevertheless, concerns about faculty training for such environments, and about learner motivation, have continued to slow down this revolution in teaching and learning. Many remain perplexed about what to do. Others hype the technology, but fail to outline how it can play a pedagogically significant role in formal or informal learning environments.

Figure 1). It fostered reflection on the diversity of learners in one's course, as well as their differing learning-related needs and preferences.

Today, I am working on a book related to motivation and retention online. It is tentatively titled, "*Adding Some TEC-VARIETY: 100+ Activities for Motivating and Retaining Online Learners*" (Bonk & Khoo, in preparation). I plan to make the TEC-VARIETY book freely available as a PDF document when done. Sample draft chapters are now available for those who e-mail me.

In addressing these issues, five years ago my colleague, Dr. Ke Zhang from Wayne State University, and I wrote a book that described a new framework that attempted to simplify Web-based learning possibilities (Zhang & Bonk, 2008). With our Read, Reflect, Display, and Do (R2D2) model, we divided the Web up into four distinct possibilities. The R2D2 framework offered a problem-solving wheel of options for engaging learners using different forms of educational technology (see

The TEC-VARIETY model compartmentalizes the Web into a number of

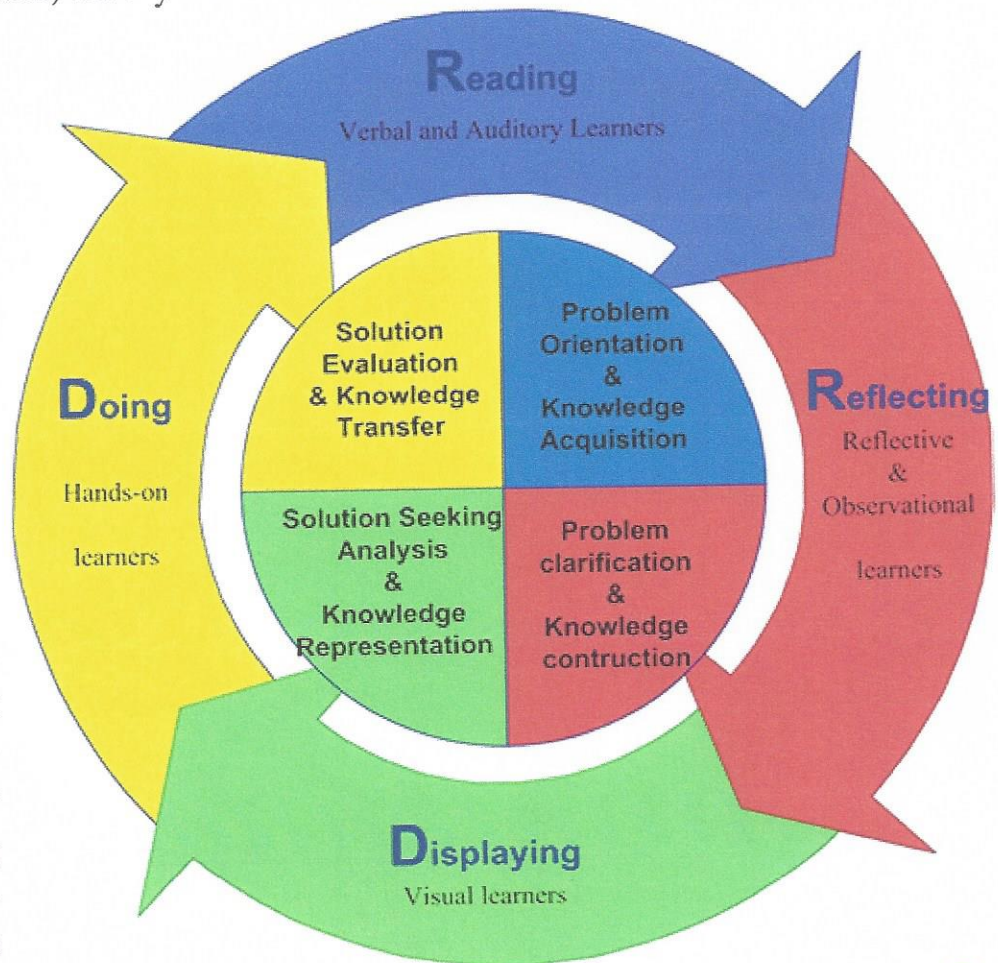


Figure 1. R2D2 Components



prominent psychological principles or ideas that, when combined, can powerfully boost the chances for online learning success. In fact, as detailed below, each letter of TEC-VARIETY stands for one or more motivational principles.

**T**one/Climate: Psych Safety, Comfort, Belonging

**E**ncouragement: Feedback, Responsive, Supports

**C**uriosity: Surprise, Intrigue, Unknowns

**V**ariety: Novelty, Fun, Fantasy

**A**utonomy: Choice, Flexibility, Opportunities

**R**elevance: Meaningful, Authentic, Interesting

**I**nteractive: Collaborative, Team-Based, Community

**E**ngagement: Effort, Involvement, Excitement

**T**ension: Challenge, Dissonance, Controversy

**Y**ields: Goal Driven, Products, Success, Ownership

The TEC-VARIETY model is the culmination of decades of psychology research on motivation. A case could be made for each of the ten main principles of the TEC-VARIETY framework that it is the most important of the ten. For some it is the social climate (Principle #1). Ice-breaking activities such as the posting of course expectations, goals and commitments, favorite websites, hobbies and interests, or eight nouns or verbs that describe oneself, provide information about the course participants which enhance later content-related interactions and engagement. While this first principle of motivation within the framework may not directly relate to course content, it sets the stage for success in attaining the optimum balance between fully-online and blended courses.

Others might argue that feedback and encouragement (Principle #2) is the most critical aspect of an online course. Such feedback might be seen in the form of “critical friend” interactions. Alternatively, it might arise in system feedback from scores on online quizzes, practice questions, and full-length exams. Encouragement and support can also come from experts who rate the work of learners in an online gallery of final products. Of course, instructors also provide feedback throughout the course in discussion forums, blog posts, course announcements, and online chats or office hours. The source or





format of learner feedback often does not matter; what is important to keep in mind is that learners want to receive some type of response to everything that they post or contribute online. Expert-, practitioner-, peer-, technology-, and self- feedback can all play a role. Besides, most instructors would risk their health, or, at the very least become frustrated, if they were the only ones offering it.

Many educators suggest that the key to successful learning is learner curiosity and inquiry (Principle #3). Learner inquisitiveness and sense of surprise can be provoked through current news items related to an online course, online databases of interesting information and statistics, and student explorations of websites or course resources. Without a sense of intrigue or curiosity for the unknown, learners may be killing time in the online course, and simply be completing tasks rather than truly engaging in learning.

Of course, learner autonomy (Principle #5) is often a rallying cry for those promoting online environments. Online learning often contains more self-directed learning expectations than traditional FTF courses. MOOCs, in particular, often offer videos, text, webinars, discussions, Web resources, and other paths for learning the course content. One might only be interested in one or two modules or weeks of a

MOOC, and skip the rest. When effectively set up, an online course offers learners much learning autonomy, convenience, and flexibility. This principle empowers learners to make their own learning choices rather than being dictated to by an all-knowing instructor or pre-prescribed content and learning pathways. Here, the course might be set up with multiple readings each week for learners to select from. Alternatively, there might be multiple-task options or video-based cases to go along with text-based ones. As a means to enhance learner choice and course flexibility, I often offer ten or more task options from which learners select four to complete.

We often hear in the literature that it is the relevancy and meaningfulness of the task (Principle #6) which determines course engagement and ultimate completion. Allowing students to write reflection papers that link their current job situation (including internship or practicum experiences) to the course content is one way to bring about immediate relevancy. Learners might also interview researchers of seminal articles, as well as designers of viral YouTube videos, or authors of books related to the class content. In these interviews, they might inquire about aspects of their work that did not appear in the publication or video, or perhaps where their work is currently focused.





Others might look to setting goals and having final products which are presented and celebrated (Principle #10). In my fully-online and blended courses, such projects often include a mobile app, Prezi presentation, video summary of one's learning, multimedia glossary, podcast show, or chapter in a cross-institutional Wikibook (Bonk, Lee, Kim, & Lin, 2009). Having an ending-course goal gives learners something to plan or reach for, as well as to celebrate when done.

I plan to document 100 different activities in my TEC-VARIETY book that can potentially help you arouse learner motivation and engagement. Each will have one or more variations; hence, there will be hundreds of possible activities. And remember, this book, as with learning online from MOOCs these days, will be free and open. I certainly hope that you will afford the time to take a look.

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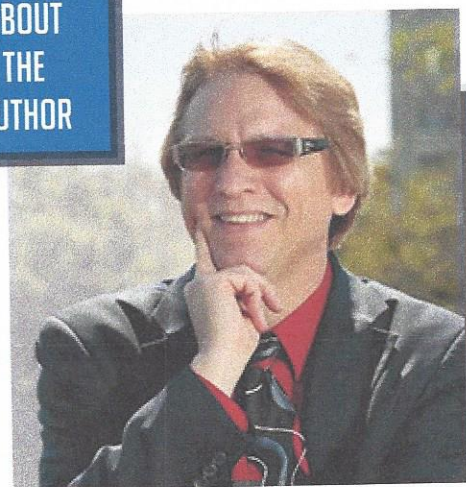
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Those are just a few motivational principles and components of the TEC-VARIETY framework. What is clear is that each principle of this framework can play a significant role in learner engagement and retention in fully-online and blended courses, including MOOCs. At the same time, no one principle is primary over the others; and a fully-online or blended course which thoughtfully mixes just a few of them should find rich success.

### ABOUT THE AUTHOR



Curt Bonk, Professor of Instructional Systems Technology at Indiana University; draws on his background as a corporate controller, CPA, educational psychologist, and instructional technologist, to offer unique insights into the intersection of business, education, psychology, and technology in his popular blog, *TravelinEdMan*. He has authored several widely-used technology books, including *The World is Open*, *Empowering Online Learning*, *The Handbook of Blended Learning*, and *Electronic Collaborators*. Learn more at <http://worldisopen.com/>



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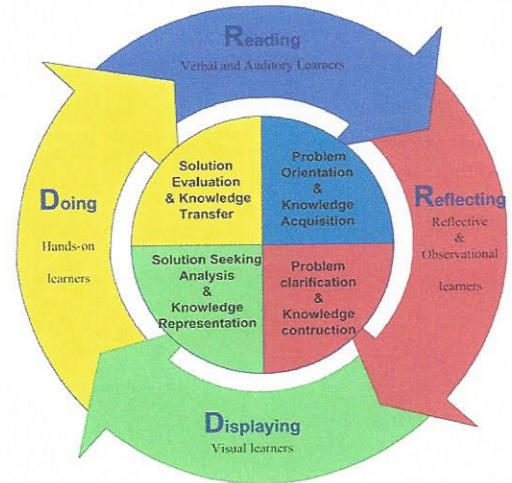


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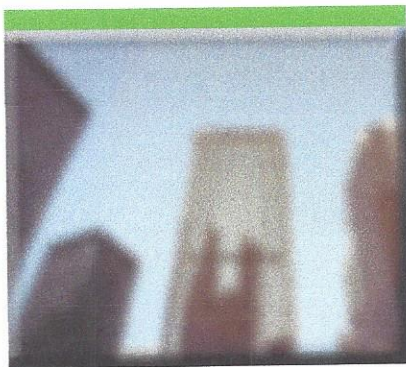


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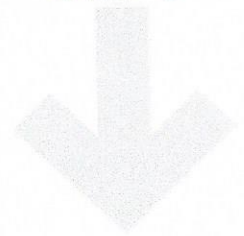


# FROM THE TEAM

## DEAR READERS,

Welcome to the summer issue of Education Magazine, covering the months of July and August. We will be back with Issue 7 this September, when we will have several big updates to share with you. At this time, we are excited to announce that Education Magazine is now available through our own Teachers Pay Teachers store. If you have TpT store credit or gift certificates, you can now use those funds to purchase individual copies of our magazine and special reports. To help you plan for the upcoming fall term, we have included a number of articles this month that focus on pedagogy and curriculum improvements. To boost student engagement and motivation, education guru Curtis Bonk from Indiana University describes his new TEC-VARIETY model. Need help meeting the new Common Core standards? Veteran educators Karen Larson and Gene Tognetti discuss some great CCSS tools that will help your students absorb the new standards. Before you begin using tablet computers to help special needs children, Scott Fowler has some valuable information on the risks and considerations involved in the use of these devices. Have you been tempted to use social media to engage your students and improve classroom communication, but afraid of the potential pitfalls? Education professor Doug DeWitt outlines some

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# FROM THE TEAM

helpful strategies to safely leverage this powerful technology. We all know that American children are choosing engineering and science based careers at an alarmingly low rate. Kristen Paul, Salisbury University's STEM coordinator, discusses some novel outreach programs being used by the University to increase STEM engagement among K-12 students.

As always, we cover educational technology topics that you can't read about anywhere else. Claude Lafamme, Professor of Mathematics at the University of Calgary and the founder and president of Lyryx, describes how his company's novel user-interface and grading algorithms allow students to provide their full work when solving math problems and receive personalized feedback. In an eye opening article on Chinese educational technology, Yifei Wu describes the wide chasm that exists between well funded urban schools in China and rural schools that lag well behind.

Finally, if you get a chance to catch your breath this summer and you're looking for a good read, Cynthia Grills describes five, interesting possibilities.

Thank you again for taking time out of your busy schedule to read Education Magazine. If you have any questions, comments, or suggestions, feel free to drop us a line at [support@education-magazine.org](mailto:support@education-magazine.org).

Have a great summer and see you again this fall,  
The Education Magazine Team

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