

ADDING SOME TEC-VARIETY

**100+ Activities for Motivating
and Retaining Learners Online**



CURTIS J. BONK

ELAINE KHOO

Copyright © 2014 by Curtis J. Bonk and Elaine Khoo. All rights reserved.

Subject to the exception immediately following, this book may not be reproduced, in whole or in part, including illustrations, in any form (beyond that copying permitted by Sections 107 and 108 of the US Copyright Law and except by reviewers for the public press), without written permission from the publishers. The authors have made an online version of this work available under a Creative Commons Attribution-Noncommercial-Share Alike 3.0 License; for details, please see <http://creativecommons.org/licenses/by-nc-sa/3.0/us/>. The e-book PDF can be accessed through the book homepage at <http://tec-variety.com>.

We encourage translation of the electronic version of this work (i.e., the e-book PDF) to other languages. However, please ask permission of the authors before doing so. To obtain permission for other uses beyond those outlined in the Creative Commons license, please contact one of the authors.

First published in 2014 by Open World Books, Bloomington, Indiana, USA
(additional information and resources available at <http://OpenWorldBooks.com>).

Paperback and Kindle versions of this book are available from Amazon and other distributors. A special hardcover version of the book is available only by contacting the first author.

PDF of entire e-book as well as all 15 individual chapters available for free downloading from the book homepage at <http://tec-variety.com>.

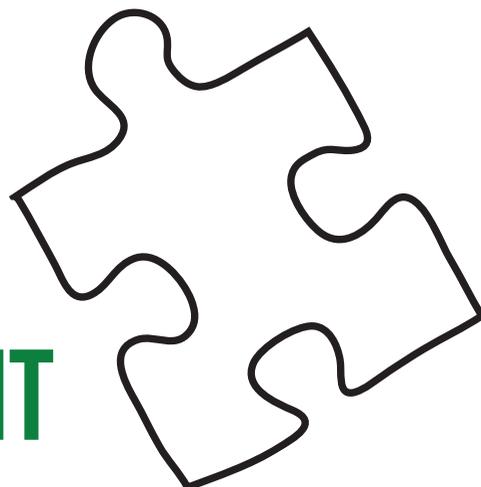
Cover design: Alex Bonk

Front cover image
Copyright: Joachim Wendler
Shutterstock.com

Adding Some TEC-VARIETY: 100+ Activities for Motivating and Retaining Learners Online
Authored by Curtis J. Bonk, Authored by Elaine Khoo
ISBN-13: 978-1496162724
ISBN-10: 1496162722
LCCN: 2014904769

CHAPTER FIVE

PRINCIPLE #2 ENCOURAGEMENT



**(Includes Feedback, Responsiveness,
Praise, and Supports)**

Nine-tenths of education is encouragement.

—Anatole France

Singer-songwriter and poet Patti Smith once reflected, “I’ve always thrived on the encouragement of others.” Just as cheering and praise from fans and friends are the lifeblood of the so-called “Godmother of Punk,” it is equally vital for your students when they venture into new waters such as fully online and blended learning. Such encouragement and supportive feedback is exactly what the next principle of the TEC-VARIETY framework is all about.

Feedback is central to education and training systems because it serves as a means to let learners know whether their performances are meeting course or instructor expectations. Motivation is sustained and enhanced in the monitoring of progress toward that goal (Anderson, 2001). Whereas grades on tests and other assignments is often the primary form of feedback in F2F courses, those in online courses appreciate feedback at more formative points in time (Dennen & Bonk, 2008).

Support and feedback requirements in online courses are different from F2F settings. Unlike students in F2F courses, online learners seek feedback on nearly everything they submit. They may also need more direct forms of encouragement and praise. In traditional walled classrooms, instructors and trainers generally offer feedback to a few

people during the class or workshop time period. Such an approach will not suffice online. Lack of feedback is deemed to be one of the main reasons for withdrawing from an online course (Ertmer et al., 2007).

There are numerous reasons why online learners seek so much feedback and encouragement to continue in the course. First, online learning might be a new experience. If that is the case, students will need reassurance that they are on the right path to success. Without some sense that they are doing well, they may lean toward dropping out of the course. Second, and related to the first point, there is often a lack of social presence on the part of instructors in online courses (Rourke, Andersen, Garrison, & Archer, 1999). Feedback gives students a feeling that someone is there who cares about their progress.

In addition to those two issues, learners have been programmed since kindergarten to expect feedback on any assignments that they turn in. In F2F classes, however, much student work is never submitted. For instance, small-group discussion is oral and feedback comes from those in the group or class. Discussion might be on reflection questions related to the readings or lectures, case problems and scenarios, debates, and role plays. In a live class, learners might be vicariously reinforced when they witness instructors giving feedback to a few of their peers on the same answers that they came up with (Bandura, 1986).

In contrast, in online classes, such activities are predominantly text-based (Lapadat, 2002). Unlike most F2F class discussions, there is a permanent record of online postings. It is not too surprising, therefore, that there is an expectation for instructor and peer comments on any text that online learners produce; written feedback has been the norm since they first started to write. At the same time, as will be shown in this chapter, such writing offers opportunities for real-world audiences and multiple forms of encouragement and advice on students' work.

As indicated in the previous chapter on tone and climate, there are many motivational tactics that have consistently been found to be effective in traditional classrooms. According to this research, instructors who attain better results create a supportive but challenging environment, project enthusiasm and intensity, provide choice, create short-term goals, and offer immediate feedback on student performance (Pintrich & Schunk, 1996; Stipek, 1998). In accordance with the TEC-VARIETY framework, there are many strategies that coalesce into successful instruction.

Decades of research on classroom-based forms of motivation have resulted in many guidelines and caveats for teachers. For instance, when providing feedback, it should be timely, genuine, appropriate, and sent by a credible source. Positive feedback gives students a message regarding their competence and mastery of the content (Reeve, 1996). It also provides a sense of support and public recognition as well as a record of that support. Feedback in the form of points earned is an indicator of whether the student has measured up to some preestablished standard of performance.

Research related to feedback is thorny and complex. After reviewing hundreds of studies related to schooling and achievement, many of which focused on feedback, Hattie and Timperly (2000) proposed a model of feedback that incorporated four levels or types of feedback including task- or product-related feedback, such as whether or not student work is correct; process feedback related to information on what the learner still needs

to accomplish; self-regulation feedback; and personal feedback directed at the learner (e.g., “you are a great learner”).

According to Paul Pintrich and Dale Schunk (1996), if you are attempting to encourage learners with praise, it should be simple and direct, unambiguous, and aimed toward positive learning progress and outcomes. The focus of that praise and feedback should be on areas that learners can control, such as their effort and strategy use, not on something deemed more static and highly difficult to change, such as intelligence (Pink, 2009). Ineffective praise, in contrast, is delivered randomly or unsystematically. Other signs of ineffective praise are when it is rather bland and uniformly presented, provides little or no information, is given without regard to effort or successful performance, and rewards the mere fact that the student participated in the activity or event (Brophy, 2010).

Prompt feedback online is not particularly easy to achieve given all the work students submit each week. Instructors might rely on peer feedback as well as that from experts or practitioners. Feedback could also be built into the online system or resources. Finally, feedback can be in the form of students’ self-assessment and self-reflection on their progress and performance.

Technologies for Principle #2: Encouragement

The technology tools for encouraging and supporting student online learning quests are wide ranging. In online courses, encouragement and feedback are often asynchronous in nature. When the two of us teach online, we often make announcements in the CMS or via e-mail that include information on recent student performances. As with most online instructors, we also post comments and observations in discussion forums. In fact, this might be the most frequent method of feedback that we use. Peers, experts, and alumni of the course can also leave feedback in our course discussion forums.

In addition to feedback in discussion forums, some instructors might rely on annotation tools such as those found in Word or some other word processing system and attach these marked-up documents in their e-mail or upload them to a dropbox. Other instructors may make direct changes to a document in a wiki, thereby leaving their feedback markers in the document history section. Still others might require students to reflect on the weekly or unit readings with blogging tools. Instructors and peers can then leave comments within them.

Some tools might be purposefully designed to provide feedback. For instance, in the 1990s, Bonk fashioned a 5-point rating system on student-posted Web links. He also created portfolio tools wherein student work was accumulated and commented on. At the same time, he experimented with posting student work to an online gallery or exhibit hall, thereby allowing experts and alumni of the course to view the work and offer candid evaluations.

Online reflection questions and self-check lists are other forms of feedback often seen when a course is globally distributed to tens of thousands of learners, such as courses on

Java programming from Sun Microsystems (Wenger & Ferguson, 2006) or router training from the Cisco Networking Academy (Dennis et al., 2006). Along these same lines, many online courses rely on the CMS or learning management system (LMS) to monitor online quizzes and tests. Feedback could be in the form of a score, or perhaps explicit information on items that students got wrong as well as information on how to solve such problems. System feedback need not just be for examinations. Technology tools can be programmed to give feedback on case solutions or responses to practice problems as well as to provide insight or suggestions related to progress in a game or simulation.

The preceding examples tend to emphasize the asynchronous side of learning. Learner support can also take place in a chat window or via text messaging. Synchronous chats with peers or experts in Skype or some other system can offer students immediate feedback on their ideas and solutions. Webinars with experts or lectures presented synchronously—using tools such as Adobe Connect, WebEx, Blackboard Collaborate (formerly Elluminate), or Go2Meeting—often include time for student question-and-answer sessions.

Clearly, there are a plethora of technologies that can help support student learning with timely and appropriate encouragement, feedback, and overall responsiveness. Survey research conducted a decade ago by Bonk confirmed that instructors in higher education and corporate training recognize the benefits of responsive feedback as well as incorporating relevant materials, goal-driven activities, personal growth, choice or flexibility, and interactivity and collaboration (Bonk, 2002a, 2002b). Unfortunately, many of these principles are rarely employed (Bonk, Kim, & Lee, 2004). Our hope is that the various examples provided in this book will not only convince people of the need for motivational techniques, but will help them implement these techniques and activities in creative and powerful ways.

Ten Online Activities in Principle #2: Encouragement

There is little doubt that encouragement and feedback are vital to online learning success. Activities that provide explicit forms of feedback should lead to higher student course satisfaction and overall success. Though there are many forms such support can take on, we offer 10 pedagogical activities in this section. In some cases, the encouragement and feedback will be coming from the instructor, whereas in other examples it will be from peers, well-known experts, practitioners, the system, or the learners themselves.

As with the tone and climate principle, this second principle of the TEC-VARIETY framework finds its way into many of the examples in other chapters of this book. In fact, it is likely that all the activities outlined in this book entail some form of feedback; the 10 included here give a sense of the range and types of learner encouragement, support, and feedback that are now possible online. And, again, though many of the ideas in this chapter are reflective of our present positions in institutions of higher learning, we believe that most of them can be applied in other educational settings, albeit with some creative insights and modifications for many of them.

Activity 11. Critical Friends

Description and Purpose of Activity. Educators are always seeking low-cost resources to use in their F2F and online courses. Among the cheapest and most useful resources that can be tapped into are the course participants themselves. Many online instructors have discovered that the learners enrolled in the course are highly trainable and typically quite willing to help out. In our classes, we have often paired students to provide weekly or monthly feedback to each other. As research has shown, the incorporation of peer support is a huge relief for the instructor, especially because course quality can be maintained when peer feedback is used in lieu of instructor feedback (Ertmer et al., 2007). One form of peer feedback is called the “critical friend” technique. Keep in mind that this instructional method has many other names including constructive friends, e-mail pals, Web buddies, and ePals. Critical friends and Web buddies provide constant feedback, reminders, advice, and encouragement throughout an assignment or the entire course.

In traditional classrooms or work situations, the critical friend is a trusted person who asks provocative questions, supplies alternative points of view or data contrary to a particular perspective, and submits a critique of someone’s work as a friend. In an online environment, the critical friend may provide reminders of task due dates, clarify items listed in the syllabus, respond to partner blog or online forum postings, and offer other forms of encouragement, feedback, and support. We often ask that critical friends provide weekly feedback on their partner’s blogging reflections, podcast performances, or discussion group postings.

Students can be paired up as critical friends in many ways. Selection of critical friend teams might be according to personal or professional interests, prior experiences or backgrounds, age brackets, or year in the program. Assignment might also be purely random. If you have a F2F experience early on in the course, you might match students up according to their degree of confidence in the class from low to high (with a highly confident person paired with a much less confident one).

Most critical friend activities in online courses assume that interactions will be via text only. Instead of text-based interactions, however, critical friend pairs could interact in Skype, Google Hangouts, or via the video chat tool within Facebook and other social media (Baig, 2011). At present, the use of Skype within Facebook is best for paired interactions, whereas Google Hangouts is ideal for teams (Arrington, 2011). In a few years, video-based interactions may, in fact, be more pervasive in online courses than text-related ones.

Skills and Objectives. Includes timely and extensive feedback, feelings of social presence and connectedness, socializing, sharing, student interaction, self-monitoring, and planning. This technique is a means to keep students on track while fostering a highly interactive learning community.

Advice and Ideas. The critical friend task can be highly effective if you appropriately structure and monitor this task. Students will appreciate having someone provide them with weekly feedback and course reminders. However, many critical friend partners habitually fail to provide weekly feedback and many others do so at the last minute. When

that happens, you will hear complaints. Listed here are some ideas that we find work well online.

First, provide students with an instructional scaffold or job aid on how to be a good critical friend. Spell out what your expectations are for this task, including the timing, type, quality, and quantity of any feedback. Of course, not only should students know that the template or job aid exists, but the instructor should explain how to use it.

Second, assign points for providing peer feedback. These might be mastery points for completing a set number of peer feedback posts. Alternatively, you could look at the quality of those posts based on criteria such as helpfulness, relevance, timeliness, coherence, persuasiveness, and depth of feedback. Some online educators opt to assess both the quality and quantity of critical friend feedback. If this aspect of the course is limited to a few points (e.g., 15 or 30 points for 15 peer feedback posts), then a quantity rating is all that is likely needed. If, however, the task is worth a substantive percentage of students' grades in the course, you may engage in a more extensive and transparent evaluation method.

Third, monitor the critical friend feedback by reading and responding to some of it, and send out reminders from time to time about the task. As students become aware of the instructor's presence, they will participate in more timely and effective ways.

Fourth, at the end of the course, you may require a brief reflection paper on the critical friend activity. In such a task, the students can review their feedback and mentoring techniques, and discuss what they learned—and what they might otherwise not have learned—because of their role as a critical friend.

Finally, you could include course evaluation questions related to the critical friend activity and how it could be improved.

Variations and Extensions. As you try out this technique a few times, you may start to tinker with it and perhaps even transform the method into something radically different. For instance, in a semester-long activity, critical friends could be rotated at the end of each unit or perhaps at the end of each week. With rotation, students are less likely to complain that their critical friend was not responsive to their needs.

Another idea is to create groups of three or four people as critical friends and to require them to offer feedback to all of their teammates each week. Although such an approach requires a tad bit more work each week from your students (i.e., responding to two or three of their peers instead of just one), it will expand the range, quality, and quantity of feedback. Naturally, students will appreciate the greater opportunities for receiving feedback and support on their posts. Their motivation for the activity will undoubtedly increase. To further spark such motivation, sets of critical friend teams might be monitored by students who previously took the course. Our attempts with the latter approach have resulted in quite marvelous interactions and course insights.

Key Instructional Considerations

Risk index: Low to Medium

Time index: Medium to High, depending on support and structure

Cost index: Low

Learner-centered index: High

Duration of the learning activity: Throughout the course or as needed

Activity 12. Student Polling and Voting

Description and Purpose of Activity. One way to engage students while eliciting feedback at the same time is the use of student surveys and polls. At the beginning of a course, students can be polled about their preferences for instructor office hours and times for any synchronous webinars or online course meetings, given that they may be working and have minimal openings in their schedules. During the course, students can also be asked how the course is going in general and asked to give their rankings among possible assignments and activities. Such formative feedback is extremely valuable for making subtle and timely adjustments to an online course.

If you are teaching a blended course with some live meetings, or if there are weekly synchronous sessions scheduled, you may want to poll students about a topic or issue before the class meeting. During the live class, instructors can then foster discussion on the minority point of view, based on the preclass polls, before those in the majority view dominate the discussion. Students could also be surveyed about the course and its activities at or near the end of the course.

Soliciting input provides learners with some control over the course while it is occurring. With student polling and voting, students have a voice in the direction and overall quality of the course. Their attitudes, preferences, rankings, ratings, and open-ended comments are not only feedback for the instructor and others helping to manage that course or unit, but they can also be shared with the fellow students in the course. Students will quickly become aware of aspects of the course that are more appealing or important to their peers. They may realize that their ideas on what the course should address may be in the minority. Along these same lines, if the instructor makes valid attempts to address any of the minority views, students may come to appreciate the course even more.

Skills and Objectives. Includes course interactivity, student feedback, responding to student needs, personalizing the learning environment, social presence, and collecting student perspectives. A really interesting poll or survey question can capture student's attention and foster discussion and community building.

Advice and Ideas. Pay attention to student preferences and ideas that are suggested in any online student surveys or polls. In addition to sharing the results of some or all of those polls, indicate how you are addressing them. If students noticeably prefer a particular task over others, reflect on how you might alter the course direction to incorporate that task. Also carefully ponder how such a task or activity can be expanded or altered the next time you offer the course. As part of such reflections, consider saving those polls and sharing the results with the next class.

There are many tools and resources for polling and surveying students. Some are built directly into the CMS or LMS. Besides internal systems, Web-based survey tools such as SurveyMonkey, Zoomerang, and SurveyShare are popular and have free limited-use versions. Dozens of other such survey tools exist, from low-end to extremely high-end options. Online survey tools are powerful in the hands of learners. They can collect information related to concepts and ideas from the course. For more details on how to design such an activity, Bonk and Zhang (2008) outline examples of how to engage students in Web-based survey research in their *Empowering Online Learning* book mentioned in Chapter One.

Simple polls are also popular and effective for gathering feedback from students. There are dozens of technology-driven polling methods to choose from. In traditional classrooms, instructors are increasingly using student response systems or clickers as a means to engage and involve their students. At the same time, interactive whiteboards and smartboards such as those from Smart and Promethean can engage students with polls and interactive questioning. Another technology growing in popularity is the use of mobile audience response systems like Poll Everywhere to collect data from students. Unlike costly clicker systems, Poll Everywhere can be used for free and it allows for comments and open-ended responses.

Online instructors can rely on one of the many Web-based polling tools when conducting a class poll. Among them are Mister Poll, Blogpoll, Blog Polls, Micropoll, Pollcode, Poll Host, and Polldaddy (Andrew, 2009). Before selecting among them, explore product examples and review company policies. Many offer a few free polls per month or per year, which should more than meet most instructors' needs. Some tools, like Polldaddy, allow for the collection of responses via a website, e-mail, Facebook, Twitter, iPad, or some other technology. Most polling tools generate easy-to-read results which can be immediately shared. Perhaps do a poll on the polling tools, asking your students which ones they prefer.

Variations and Extensions. A student or a team of students could design polls for each other related to the course contents and activities. The data that they collect can be submitted as a report to the instructor on how to improve the course. Students could also employ surveys and polls to arrange group meetings. If there are multiple sections of the same course or training experience, surveys and polls could be used across them and then shared so that instructors and students could note any similarities and differences across the course sections.

Key Instructional Considerations

Risk index: Medium

Time index: Medium

Cost index: Low to High (depending on system or tool selected)

Learner-centered index: High

Duration of the learning activity: As needed

Activity 13. Online Suggestion Box

Description and Purpose of Activity. An online anonymous suggestion box might be built for a course as a means to improve it continually. If you do not have the resources to create a website or system for student suggestions, you might try using a wiki tool that keeps the names of the participants anonymous. In addition, in a wiki, students could build on each other's suggestions.

We recommend keeping the suggestion box open for the entire semester, even though it may be used only at the end of the course. Keeping it open would grant students a sense of power and control over unclear assignments, areas of the course that they believe could be improved, and any dilemmas or frustrations that they are experiencing. As indicated in Chapters Two and Three, students' feelings that their ideas are being respected should help with course retention and satisfaction.

Skills and Objectives. Includes analysis and evaluation skills, idea generation, creativity, and reflection. If the suggestion box or tool is viewable for the class to read, learners can build on each other's ideas; in that case, collaboration and comparison-and-contrast skills would be emphasized as well.

Advice and Ideas. Do not worry about assessment of this task. However, you might provide bonus points to what you feel are the best suggestions. Because there is no grade attached to this item, be sure to remind the students that the online suggestion box exists and that you are checking it from time to time. Watson (2000) recommends that instructors not only keep track of the suggestions, but to post them along with the instructor's corresponding decision about each one. In fact, you could maintain a list of suggestions from previous semesters along with brief descriptions of how they each were addressed. In this way, students know that their ideas and perspectives matter. They will also realize that the instructor is concerned with improving the course.

Variations and Extensions. The suggestion box could be used across different sections of the same course. You could hold a competition between classes with prizes for the class or for the individual student with the most interesting or useful suggestion. Alternatively, such a competition could take place between students in the same class who are grouped by career interest, year in the program, gender, or some other variable. High-scoring classes or teams would be recognized with some award or incentive, such as the instructor posting the names of the winners to an online course Hall of Fame.

Key Instructional Considerations

Risk index: Medium

Time index: Low

Cost index: Low

Learner-centered index: High

Duration of the learning activity: Throughout the course or as needed

Activity 14. Minute and Muddiest Point Papers

Description and Purpose of Activity. Another way to be responsive to learner needs in your online course or training event is to have students reflectively write from time to time on how they think they are doing in the course. Ask them to write an e-mail for one or two minutes about what they have learned from the readings or lectures as well as what they did not learn so well. When posting, learners could elaborate on the cloudy, confusing, or muddy aspects of the class. Some refer to this activity as a "minute paper" or "muddiest point paper."

These short reflections help learners review key points and summarize the content, which the instructor can then check for understanding. The review process need not be long. All it takes is a few minutes of reflective writing for students to solidify their learning. Instructors who can promptly and thoughtfully respond to student comments and address their "muddy" or unclear points or areas of felt tension will likely find more success than those who do not.

There are many technologies at your disposal for this particular activity. One alternative to e-mail is to ask students to write their minute papers in a wiki that accumulates their

posts; another idea is that they post these comments to a discussion forum or to an individual or team blog. There are also online collaboration tools that could handle this activity. The main objective is to provide an opportunity to formatively evaluate aspects of the course (Brown, 2002).

Such moments of evaluation help instructors as well as the designers of the course understand what is and is not working and then make attempts to improve it. At the same time, instructors can respond to the student comments with feedback on how the course or unit might be altered. In this way, feedback and support travel back and forth between students and the instructor.

Skills and Objectives. Includes idea generation, critical analysis and reflection, and writing as thinking. Another key objective is to record ideas that may be troubling the learner, thereby freeing up mental capacity for other course tasks and activities.

Advice and Ideas. Be specific about what you expect students to include in their minute papers. Consider including a few examples of minute papers from previous semesters of the course. In addition, use this technique sparingly. If you collect minute papers weekly, you may overwhelm your students as well as yourself. If you are constantly collecting formative feedback, you will have less time for day-to-day course management issues. However, the amount and timing of this activity will vary depending on the type and level of course, the tools available, and many other factors.

Variations and Extensions. Instead of giving instructor feedback, you could consider having students post minute or muddiest point papers to a discussion forum for peer feedback. Alternatively, students might be required to use their weekly or monthly minute papers as the basis for end-of-semester super summary assignments on what they have learned and not fully learned in the course. Another variation of this task would be to ask for the “clearest point papers” wherein they write about the concepts and principles that they have solidly learned that day or week.

Key Instructional Considerations

Risk index: Medium

Time index: Medium to High

Cost index: Low

Learner-centered index: High

Duration of the learning activity: As needed

Activity 15. Comments and Annotations

Description and Purpose of Activity. Sometimes feedback is indirect and subtle. Other times it is direct and pointed. Annotating text is one example where that feedback is typically more direct. For instance, you can give students a writing assignment where a partner or team member must edit, comment on, and annotate that work. Critical friend or team member feedback in the form of comments and annotations can help students to see problems in their text and think of ways to address them. For instance, there might be a series of flow issues, a lack of depth, areas needing additional support or justification, and so on. Alternatively, a student may simply be stuck and not know what to do next.

Sometimes students are lost or not sure of the quality of their writing. Comments and annotations help shape the document. The instructor can decide to have students do everything in Microsoft Word, Google Docs, or some other system. Microsoft Word, for instance, captures comments and edits in different colors for each reviewer or partner with its Track Changes feature. Feedback from fellow students would be at a highly personal level and within their zone of proximal development (Vygotsky, 1978). Feedback could also come from experts and students who have taken the class in the past.

Skills and Objectives. Includes social interaction, critical analysis, writing, professionalism, the juxtaposition of comments and ideas, and gaining diverse perspectives. A key objective of annotating writing is to obtain feedback of some type on a work in progress or near-final draft as well as to have an audience beyond the instructor.

Advice and Ideas. We find tracking changes in Word to be highly beneficial though it can require much time. Whatever system you choose, be clear about the processes and procedures for annotation. Set the due dates and forms of paper exchange (e.g., course system dropbox, e-mail, physical meetings, and the like). If there are multiple rounds of feedback or multiple providers of that feedback, consider creating an online partner sign-up form. You should also monitor the process and send task requirements and due date reminders when appropriate. If you are using a wiki tool, edits are immediately made in the document. As a result, changes are much more difficult to track.

Variations and Extensions. Instead of student comments and annotations, the feedback partner could be real-world practitioners, well-known experts, or former students of the course. Another alternative would be for one student to annotate a paper and forward it to another student for additional annotation.

Key Instructional Considerations

Risk index: Medium

Time index: Medium

Cost index: Low

Learner-centered index: High

Duration of the learning activity: As needed, depending on assignment

Activity 16. Screencasted Supports and Directions

Description and Purpose of Activity. There are many forms of online mentoring and support. Some rely on text-based instructional scaffolds such as think sheets, job aids, assignment templates, and worksheets. Instructional designers might encourage using an online tutorial or wizard that provides an overview of expectations. Instead of sophisticated lecture capture tools like MediaSite, Tegrity, and Echo360 or multimedia and Web production tools like Camtasia, Adobe Captivate, or Articulate Storyline, tutorials can be created with much less effort and expense.

Sometimes an instructor's goal is to illustrate concepts and ideas on a computer screen. With the emergence of the Web 2.0, technologies for producing these help systems and demonstrating procedures and products have become much easier to use and often require minimal training, if any. One type of software to accomplish this is called

“screencasting.” Tools such as GoView, Screenr, Jing, Overstream, and Screencast-o-Matic are among the more popular (Mukherjee, 2011) and most have free versions.

A screencast is akin to making a movie of your computer screen in order to demonstrate a technology tool or resource that you are using in the course. You could also be mapping out specific steps or procedures for a particular task. At the more basic level, the user speaks as he explores or showcases particular websites or items in a website. Once done, a link to the file can be shared. Some tools allow for quick posting on YouTube or sharing links within Twitter, Facebook, or Flickr. Given that these are free tools, there are typically limits to the number of minutes for each screencast file. Some tools like Screencast-o-Matic allow for a video of the user as well as added text or animations. Additional sophistication will undoubtedly be added during the coming years, including features that enable users to edit their files and automatically share them to a range of social networking sites and groups.

Screencasting systems have many roles in online education and training. The video demonstrations that they produce are often available on demand for the mobile learner. These on-demand systems help focus the learner on critical aspects of a Web resource or tool that the instructor has incorporated into the class. They also personalize the learning and bring a sense of the instructor’s social presence.

Skills and Objectives. Includes feedback, listening skills, the ability to follow directions, reviewing key course concepts, self-directed and on-demand learning, reflection skills, understanding sequential flow and procedures, and discriminating among particular tool or resource features. A key goal of this activity is to provide expert guidance and just-in-time support.

Advice and Ideas. First, ask learners about unclear assignments and difficult-to-navigate resources and tools used in the course. Second, think about all the other online tools and resources you plan to use in the online course. Then jot down a list of possible tools, resources, and activities that may require a screencasted session. Organize notes and ideas about each one. If you want to create extremely high-level demonstrations that are usable beyond your class or training situation, check on possible funding sources or internal support for the production.

Be sure to script each show and produce a couple of practice screencasts. Once done with a production, usability is a key issue. Test out each screencast before actually using them in the course or program. To determine bottlenecks or problems, ask usability testers to think aloud as they use your screencasted video. In addition, during the semester, gather feedback on each screencasted tutorial or help system that you have created. Review questions may make each video more engaging for the users. After such review, consider making that content object a free and open educational resource available to the world community.

Variations and Extensions. Many of your students will be more technologically savvy and have experience and interests with online social media and digital tools. You could solicit their support in creating screencasted videos that can scaffold the use of new online tools and resources in your course. In fact, each student (or pairs of students) might be assigned to create one such screencast demonstration during a course. Alternatively, you could allow them to eliminate or drop an assignment in return for producing a set number of screencasted tutorials, wizards, job aids, and help systems. You may even

coordinate a screencast movie night or class press conference for their productions. Consider offering incentives and awards for the most informative, creative, and well-designed screencasted tutorials and help systems. The judges can be former students, experts in the field, colleagues and other instructors, and fellow students.

Key Instructional Considerations

Risk index: Low

Time index: Medium to High (depending on the number that need to be produced as well as familiarity with this type of task)

Cost index: Low to High (depending on whether you use free systems and tools or those that contain more features and are costly)

Learner-centered index: Medium

Duration of the learning activity: As needed

Activity 17. Embedded Reviews and System-Scored Practice Tests

Description and Purpose of Activity. One area of rising importance in the world of online learning is to embed different types of system checks and reviews of student learning in the course. Such system reviews and self-check examinations are especially useful for courses heavy in terminology, such as introductory and advanced courses in biology, psychology, anatomy, business management, and zoology. Actually, progress in most disciplines could be enhanced and perhaps accelerated with timely and appropriate use of embedded practice tests and reviews that are immediately scored by the system. Students want to know that they know the content. At the same time, instructors need help in providing adequate feedback and support. In addition, administrators want to standardize the content as well as establish quality standards for their online courses and programs.

The Khan Academy, for instance, is a popular website for skill-based learning among teenagers and young adults (Koelber, 2011). With over 2,300 videos for learning basic facts in science, mathematics, business, history, statistics, computer science, and other areas, there is much to choose from. In basic math facts, students can ask for hints, watch a video explaining a problem, and accumulate “energy points” for effort. Various target point totals are intended as student motivators. These types of motivators and system supports will undoubtedly increase in the near future thanks to funding from the Gates Foundation and from well-known entrepreneurs (Ferenstein, 2011; Kaplan, 2010).

The system that the Khan Academy currently has in place recognizes a learner as competent in a skill after correctly completing 10 problems in a row. Data that a teacher, mentor, parent, and student can access is displayed showing the time the student has spent on specific problems, videos, and so on. The exact problems that a student got right and wrong are saved by the system database and can be displayed immediately upon request. As learners accomplish more, they can earn Meteorite, Moon, Earth, Sun, and Black Hole merit badges, each indicating higher levels of competencies. As will be explained in the next chapter, such gamelike features are highly motivational. In effect, the system is tracking student progress and providing a custom profile on each learner.

As with this second principle of the TEC-VARIETY framework, encouragement, support, and feedback are critical aspects of the Khan Academy. And more forms of individualized feedback and assessment will emerge as their student tracking and assessment systems are upgraded, expanded, and tested with the influx of new capital it has received. Keep in mind that the Khan Academy is free and is targeted at the K–12 level. Countless other sites charge a monthly subscription, such as Virtual Nerd for math and science learning, ePrep for standardized exam preparation, and Vocab Sushi for learning vocabulary.

Many such tools and systems are available for higher education and corporate training as well. There are medical cases online wherein the learner solves problems and the system evaluates the response. For instance, a popular blood pressure simulation from California State University at Chico provides information, demonstrations, and actual blood pressure testing sounds. It ends with a series of true/false self-check questions and very simple feedback (i.e., “yes, that is correct” or “no, that is incorrect”). Learning a foreign language online through systems such as Livemocha might also entail earning points as a student identifies words to use, proper grammar or sentence structure, or matches the correct sentence with an audio file or picture.

Suffice it to say, all online learning stakeholders want to empower the learner and provide a more personalized and individualized form of instruction. Embedding concept reviews and practice tests in a course makes a lot of sense. Such system feedback saves online instructors an exorbitant amount of time; it is no small wonder that these computer-based forms of feedback are growing in popularity.

Skills and Objectives. Includes reviewing facts, concepts, and principles, trying out concepts, immediate system feedback, self-directed learning, self-monitoring, repeated practice, reflection on the knowledge acquired, and knowledge recognition and application. To be properly assessed, most practice test items are designed at the knowledge or basic fact level (e.g., online flashcards); higher-order cognitive skills are much more difficult to analyze but undoubtedly will be targeted in the coming decade.

Advice and Ideas. If your discipline or subject matter area is constantly changing or is relatively new or unique, you may need to design your own review items and practice tests. Before you do, be sure to check for internal as well as external funding sources. Once you have found or created the necessary content, do not simply make such content available; instead, require students to complete a certain percentage of it. Consider setting a criterion score or master level of performance such as 75 or 80 percent before students are allowed to move to the next level. In some systems, the instructor must make a decision about how many retakes will be allowed.

Variations and Extensions. One option or extension for this task is to have competitions with other sections of a course or with learners at other locations. The class with the highest percentage of learners reaching a certain level of performance could be recognized in some fashion. Students could also build some of the practice questions or examinations, or even design the embedded practice tests for future students in the course. Their completed work could be entered into a national competition or submitted for a conference.

Key Instructional Considerations

Risk index: Low

Time index: Medium to High (depending on the availability of premade content)

Cost index: Low (depends on systems selected)

Learner-centered index: Medium

Duration of the learning activity: As needed

Activity 18. Asynchronous Expert Feedback and Mentoring

Description and Purpose of Activity. When the Web was just beginning to be used as a platform for delivering online learning back in the mid-1990s, Bonk quickly became mesmerized with the potential of the World Lecture Hall (WLH) from the University of Texas at Austin. College instructors from around the world were posting their syllabi to the WLH. Amid the excitement, there was discussion about whether college instructors might someday be replaced by free online courses and resources.

A few years later, Bonk and his colleagues began to analyze WLH syllabi for the types of online interactions that they incorporated (Cummings, Bonk, & Jacobs, 2002). They wanted to know the degree to which students were being required to interact with other students in those courses. They also sought to determine how often students were interacting with instructors as well as outside experts. Similarly, they wanted to know the percentage of tasks within each posted syllabus during which instructors interacted with other instructors as well as with students and with practitioners. They found that the least used form of interaction was between students and experts or practitioners. Such a finding was quite ironic given today's emphasis on real-world experiences and interactions combined with the power of the Web to make it possible.

There are assorted reasons for practitioners and real-world experts to offer feedback to online learners. First, it creates an authentic audience for learner products and reports. For instance, as noted in an earlier example, you can bring in a few graduates of the course to provide feedback for your students or offer important course reminders. Second, such an activity helps to situate student learning in the real world. Third, external experts can help judge or rate projects and products such as the quality of case solutions. Fourth, practitioners could offer advice and insight about how particular topics and skills are actually applied in the real world. They may also have heard about entry-level positions that are currently open in their field or perhaps even offer an internship to one or more students. Along these same lines, they may collaborate with students on projects or perhaps serve as a project adviser or mentor.

When we have embedded such expert interactions in our online courses within our asynchronous discussion forums, our students are extremely excited to hear the insights and adventures of the expert (Lee & Bonk, 2013). Sometimes they even gain their specific feedback and mentoring on their class projects. It is a new form of cognitive apprenticeship which is becoming increasingly highly used and valued.

Skills and Objectives. Includes connecting content knowledge from books and lectures to the real world, the identification of key concepts and principles, timely and thoughtful feedback, an appreciation of multiple perspectives, and learner engagement. A key goal

is the creation of a cognitive apprenticeship in which learners become budding novices within an established learning community.

Advice and Ideas. Publications, conference papers, presentations, and social networks can increase the profile of your course or idea. We have often been contacted by potential course mentors after giving a conference talk or presentation. In addition to such external support, you could ask students to come back and help when they complete your course or training experience. Keep track of those who express interest. Be clear about the roles and expectations for those external to your course who are asked to provide feedback and mentoring. Provide appropriate forms or guide sheets on what you are expecting the mentors and experts to do. Make sure that they have access to the asynchronous conference forum or system and know how to use it effectively. During the course, be sure to monitor mentor and guest expert responses, especially those who are new to your course or situation.

At the end of the course, solicit feedback on the overall activity as well as advice on the guide sheets and scaffolds provided. Perhaps one or two of the external experts will offer support for updating them. A couple of students in the course may also offer their perspectives on how the mentoring might be enhanced in the future. Finally, be sure to thank everyone involved.

Variations and Extensions. Ask students to reflect on the various forms and types of mentoring that they have received during the course. In that reflection paper, it would be wise to ask them to link the forms of mentoring to the content of the course as well as their career aspirations. Also consider asking the practitioners and mentors to respond to the reflection papers.

Key Instructional Considerations

Risk index: Medium

Time index: Medium

Cost index: Low to Medium

Learner-centered index: High

Duration of the learning activity: Weekly or as needed

Activity 19. Synchronous and Mobile Mentoring

Description and Purpose of Activity. For those interested in the role of experts in online classes, April 7, 2011 was a landmark day. That was the day that Tutor.com, which claims to be the largest online tutoring and homework help service available, announced that its services were now available for mobile devices (Tutor.com, 2011). Students could suddenly use applications on their iPhone, iPod Touch, or iPad to connect to an expert in real time to answer their questions, problems, and homework help needs. There is good reason to believe that such services will be the norm within 5 to 10 years, not just in middle and high school settings, but in any education or training situation. Recent reports from the Pew Internet and American Life Project show massive societal changes toward the use of mobile devices, especially among minorities in the United States (Smith, 2010).

Mobile interactions can individualize instruction and offer support on demand; in effect, an instructor is available when needed. To introduce students to this kind of interaction, you could assign students to solicit the help of a mobile mentor at least once a week in the online course. Students could not only ask questions about problems that they are facing, but they could take a picture of their problem and send it to their tutor or mentor. The mentor would then review the situation and offer guidance, share Web resources, and chat with the student.

These forms of interaction will become increasingly widespread during the coming years with Web conferencing, interactive whiteboards, video capabilities on smartphones, video-enhanced discussion forums, and other related technologies. Wearable computers like Google Glass are projected to have an impact on professional fields like health care and business with immediate mentoring and expert support systems (Aungst, 2013; Poulos, 2013). As such technologies proliferate, the supply of mobile mentors and synchronous or real-time forms of interaction will escalate. So, too, will the forms and levels of expertise that they offer. Imagine, if you can, a decade or two down the road when learners can excitedly explore any path while knowing that expert supports are always available when problems or confusion arise.

Skills and Objectives. Includes on-demand learning, problem clarification, connecting content knowledge from books and lectures to the real world, questioning skills, the identification of key concepts and principles, and learner engagement. As with the previous example, a key goal here is apprenticeship into a content area or field.

Advice and Ideas. You might create a mentoring or support network application for student mobile devices where none exists. Before adding someone to the mentoring network, screen all mentors and provide them with expectations or guidelines for support. Assign students to particular mobile mentors based on their interests and backgrounds. Share the activity with colleagues and discuss how the mobile mentoring network could be expanded and fine-tuned. You might consider conducting action research on the effectiveness of the mobile mentoring application.

Variations and Extensions. Students may be asked to find and select a mobile mentor whom the instructor must approve. They could also design prototypes of a mobile mentoring application. Students could present their final products at the end of the semester. In fact, consider creating a competition for the best mobile mentoring application in your content area.

Key Instructional Considerations

Risk index: Medium to High

Time index: Medium

Cost index: Low to High

Learner-centered index: High

Duration of the learning activity: Weekly or as needed

Activity 20. Learner-Self Interaction and Self-Feedback Forms

Description and Purpose of Activity. This chapter's previous nine examples involve many forms of encouragement and feedback. Activity 12 entailed feedback from students to instructors in the form of surveys and polls, whereas the first activity of this chapter employed critical friend or peer feedback experiences. Some of the others highlighted expert or practitioner feedback to students. And still other activities threw the human out of the feedback loop altogether and had the system or machine evaluate and respond to student submissions. In such situations, learners interact with the online content instead of with peers, experts, or instructors.

All these forms of interaction—learner-learner, learner-instructor, and learner-content interaction—are based on decades of distance education theory (Moore, 1989). In 1998, Soo and Bonk (1998) introduced the idea of learner-self interaction. This type of interaction refers to a learner's personal reflection on the learning-related content, the learning process, and her personal understanding. In learner-self interaction, there is an inner dialogue about the ongoing learning process. The learner constantly rethinks and reframes her understanding of the content through this inner dialogue. With enough learner-self interaction activities, the learner can develop self-regulated learning skills and become a self-directed and independent learner.

Learner-self interaction can be fostered in many ways. First, the online course or experience might have self-check and reflection questions embedded at key points in the process. In a business management class at MIT on Generating Business Value from Information Technology (MIT, 2011), students are given discussion question such as:

- Describe UPS and its business environment, and,
- Critique UPS's strategy for online business and its business model.

These discussion questions, found at the MIT OpenCourseWare site, though excellent for spurring class discussion and reflection, might be reshaped for learner-self interaction as follows:

- What did you learn about UPS and its business environment from the case that was presented? Ask yourself: What did I fail to learn? What other types of information resources would have helped me learn more? How might I have acquired such resources?
- Think about what you have learned about online commerce and the business models of other companies. What ideas and learning resources were critical to this new learning? Write down some key principles that seem to work. Then critique the online business approach and model used by UPS based on your new learning.

These are just a few examples of learner-self interaction types of questions. Instead of such open-ended queries, learners might simply respond to a checklist of skills and competencies to indicate if they have acquired them or not. Learners could submit their responses individually in an online form after which they could read their peers' responses. Additional reflection papers or activities could wrap around such a submission process. Other options could have students personally reflect in a wiki that accumulates

all student posts, or requires them to reflect individually on their learning progress (or on a set of questions like those in the MIT example) in a blog. Yet another possibility would be to use a threaded discussion forum for student reflections. Each student might post a designated thread.

Skills and Objectives. Includes personal reflection, review concepts learned, concept attainment, comprehension and application skills, the development of self-regulatory and metacognition skills, and personal awareness and feedback. The key is for students to take time out and think about their learning journey. Feedback is drawn from within instead of outside.

Advice and Ideas. In some ways, this might be a novel activity for learners. If it is, be sure to provide examples from previous semesters or versions of the course if available. Keep in mind that students are often highly critical of their own work. As a result, some of them may need timely doses of encouragement and advice after reflecting on the skills that they learned. In addition, consider looking for common themes across the student self-reflection posts and list them.

If unique online forms or reflection templates are created, you could reuse such forms in later semesters or versions of the course. A vast system of reflection activities could be embedded into the course to foster student self-directed learning and reflection.

Variations and Extensions. Instructors could weave several learner-self interactions in a series of activities, followed by individual summary reflection papers that are shared with a critical friend or learning partner. The two individuals could also reflect on differences in their learning approaches as well as the results.

Key Instructional Considerations

Risk index: Low

Time index: Medium

Cost index: Low

Learner-centered index: High

Duration of the learning activity: As needed

Final Reflections on Encouragement

In building on Chapter Four's emphasis on the creation of a safe and engaging online climate for learning, this chapter highlights the forms and types of feedback and encouragement that can communicate to online learners that they are on the happy road to success. As indicated, there are many types of instructional supports or scaffolds that can be embedded into fully online and blended courses to elevate learner motivation as well as the learning outcomes. When this occurs, course satisfaction and completion rises, as does overall program completion.

The 10 activities highlighted here showcase the assorted ways in which feedback occurs and the numerous dimensions of feedback that must be considered. In addition to instructor feedback, many online instructors now embed peer-related feedback like critical friend or Web buddy activities in their courses. Others utilize system and outside expert feedback. And still others embed opportunities for self-feedback and reflection.

No matter the setting or the instructor's experience, each type of feedback has merits and should be considered when designing and implementing an online course experience.

As suggested regarding the ideas related to tone and climate in the previous chapter, we encourage you to find encouragement and feedback mechanisms that work for your situation. You know your course goals, materials, and audience best. You might decide to merge expert feedback with your own. Or perhaps you will choose to incorporate system feedback for certain tasks, weeks of the course, or milestone markers.

For some of you, the ideas of this chapter will save you time as you rethink your feedback strategies. After testing some of them out, be sure to share those that work well with your colleagues and ask for their feedback. Also consider expanding on the suggestion box idea in Activity 13 to solicit formative and summative feedback from your own students. Effective feedback need not be just "for" the learners; it can also be "from" them.

Keep experimenting with these ideas and then go beyond them. To do this, we suggest you read other books and materials or attend conferences. Those who feel adventurous can browse the Web for examples of instructional supports and feedback mechanisms. From that browsing, such individuals can also get a sense of how other online instructors encourage and support student course success. If you find something of interest online, ask the developer how he responds to student needs. What types of rewards does he use? Have any of your colleagues created a job aid or online tutorial that you might use in your own courses?

You need not create a feedback system from scratch. Open educational resources can be mined for feedback and support ideas. Those in higher education should look for online course resources posted to MERLOT, Connexions, or the Open Educational Resources Commons. If you are at the K–12 level, we recommend that you try out resources at Curriki as well as Connexions. Tired? There is also much in the OpenCourse-Ware project from MIT, the National Repository of Online Courses (NROC), and Jorum (from the United Kingdom). See the course Web resources at the end of this book.

If you have decided that peer-based feedback will be a key part of your feedback system, you must train your students to do this properly. They should not just randomly comment on fellow student work. Once in place, feedback can have a significant impact on the amount of work you face. If the rubric clearly specifies the assessment criteria and standards (Conrad & Donaldson, 2004), students will be well-armed assistants. And when their feedback is combined with instructor and system feedback, there are many valuable opportunities for student reflection and improvement.

The forms of encouragement, feedback, and overall support will vary depending on whether the activity is synchronous or asynchronous. In synchronous situations, students can immediately ask for clarification and elaboration on points made. At the same time, in many systems, once the synchronous session ends, the feedback vanishes. Instructors relying on synchronous activities should inquire about ways to archive sessions and make them available for later viewing. We have found that placing links to each synchronous session in the resources section of our course management system or class wiki is sufficient. In asynchronous forums, feedback may extend over several days or weeks, resulting in more opportunities for highly reflective feedback. However, the amount and timing of that feedback must be considered. If the student never reads it, it does no good.

As we draw to a close on the second component of TEC-VARIETY, we should remind the reader that Web-based instruction is relatively new. More innovative forms of learner support and feedback will undoubtedly emerge during the coming decade. Already we see this happening with social networking technology currently entering the academic world. Remember, too, that as stated in the opening section of this chapter, students want feedback on everything they do. Given this, we could easily make the case that encouragement, responsiveness, and feedback is the most important component of the TEC-VARIETY framework. Without effective feedback and support components in place, most students will flounder online just like Patti Smith would likely flop on stage without her adoring fans encouraging her.

It is now time, however, to explore the third component of TEC-VARIETY related to fostering student curiosity. Those curious about the contents of Chapter Six need only turn the page.

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. **Tone/Climate:** Psychological Safety, Comfort, Sense of Belonging
2. **Encouragement:** Feedback, Responsiveness, Praise, Supports
3. **Curiosity:** Surprise, Intrigue, Unknowns
4. **Variety:** Novelty, Fun, Fantasy
5. **Autonomy:** Choice, Control, Flexibility, Opportunities
6. **Relevance:** Meaningful, Authentic, Interesting
7. **Interactivity:** Collaborative, Team-Based, Community
8. **Engagement:** Effort, Involvement, Investment
9. **Tension:** Challenge, Dissonance, Controversy
10. **Yielding 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>.**

Curtis J. Bonk, PhD, is professor in the School of Education, adjunct in the School of Informatics, and associate faculty member in the Cognitive Science program at Indiana University. He is also the author of *The World Is Open* and several other books.

Elaine Khoo, PhD, is a research fellow at the Wilf Malcolm Institute of Educational Research (WMIER) based in the Faculty of Education at The University of Waikato, Hamilton, New Zealand.