Five Key Components of Online Instruction

By Simon Ringsmuth

simon.ringsmuth@okstate.edu

Distance learning has evolved significantly over time, changing from correspondence courses in the late 19th century to modern online classes that offer rich engaging multimedia educational experiences and require little more than a laptop or mobile device. In the past decade enrollment in online courses at secondary institutions has increased steadily, and data from the United States Department of Education indicates that in 2016 over 33% of all college students were enrolled in an online course. This is a dramatic increase from a decade prior, when fewer than 15% of students reported taking at least one online class, and the trend shows no signs of stopping. Yet despite the massive popularity of online courses many students enrolled in online education are far less satisfied with their educational experiences compared to traditional face-to-face classes. In their analysis of data from an introductory undergraduate statistics course delivered both online and face-to-face, Summers, Waigandt, & Whittaker (2005) found that online students were significantly less satisfied with their experience despite being taught by the same highly qualified and experienced professor. These results echo other studies as well, such as the findings from Shi, Du, Jiang, and Bin Saab (2011) whose research showed that 80% of their sample of college students said that online courses are not as effective as traditional courses. These findings lead to a broader question: what can be done to make online classes more effective and engaging?

Practical experience teaching, and taking, online classes paired with an examination of existing literature regarding online and face-to-face teaching reveals five key elements which compose the fulcrum on which a successful online class often balances, regardless of the subject being taught. Other instructional design elements are important such as a well-written syllabus, activities and assessments that align with course objectives and outcomes, and ensuring students have clearly-understood methods by which they can engage with the material, but what many online instructors fail to realize is that there are behaviors and approaches that can go a long way towards ensuring success that are difficult to quantify but imminently necessary for quality online education. These five key components, when present, can help elevate an online class from a series of tasks that must be completed to a rich learning environment in which students are actively engaged.

In their seminal paper on educational best practices, Chickering & Gamson (1987) discuss seven principles that lead to more effective undergraduate education and include things such as contact between students and faculty, an atmosphere of cooperation, and a respect for diverse talents and ways of learning. While these are all important in any educational setting, the unique nature of online education requires slightly different practices that can be adopted for successful online instruction. Implementing these five components will not necessarily guarantee that an course will be a success, but failing to have them will likely lead to an online educational environment that is far less engaging and impactful than it otherwise could be.

1. Communication
Most online courses employ communication tools such as discussion boards and news posts but effective instructors need to use those tools wisely, and often, to keep an open line of communication between themselves and their students. Participants in an online class need to know that their instructor is involved in the class, cares about them and their success, and is personally invested in the material. Freitas, Myers, & Avtgis (2009) found that students in online classes are more likely to perceive their instructors as less responsive than instructors in face-to-face classrooms, which means it is incumbent on online instructors to continually communicate with their students so as not to appear out of touch with the class. Delaney, Johnson, Johnson, & Treslan (2010) found that online students ranked instructor responsiveness as the second most important characteristic of an effective teacher, just below respectfulness. College students are keenly aware of whether the class is a priority for the instructor and will often raise their own level of engagement when they know that the class matters to their instructor. Conversely if the course is not a priority for an instructor, as evidenced by a dearth of communication between the instructor and students, neither will it be for the students. Effective communication can take a variety of forms, including:

- News updates posted to the Online Classroom or Learning Management System
- Emails to remind students of upcoming assignments
- Webcam video updates from the instructor recorded at weekly intervals
- Online video conferences using tools embedded in most Learning Management Systems
- Text-based chat sessions
- Regular contributions to the class discussion board
- Posts to class groups on social networks such as Facebook or Twitter

In addition to these practices, Scott & Nussbaum (1981) found that instructors who not only communicate regularly with students but engage in some degree of self-disclosure such as talking about their own lives, families, hobbies, etc. were seen by students as more effective teachers overall. Online classes are uniquely positioned to facilitate these types of communication specifically with regard to webcam videos (often posted as news updates on the online classroom site) as they can be recorded in instructor's homes or out in the field, and often involve a more casual and informal style of communication that students appreciate. While some instructors display a reasonable amount of trepidation at the thought of recording videos in non-professional settings, Guo, Kim, & Rubin (2014) found that students actually prefer informal, less-professionally produced videos to those which are slick and highly polished. However regardless of which medium is utilized, communication should be frequent and substantive. Students often interpret a lack of instructor communication as a sign that their professor is no longer invested in the course which is usually followed by a lack of engagement on their part as well.

2. Expectations
Consider the following fictional narrative:

Katie, a 20-year-old student from the United States, wanted to spend her summer break traveling around the world. She spent months reading articles and blog posts about a largely unknown European country called Lesscinanlo. Fascinated, Katie set her sights on visiting Lesscinanlo after the semester was over. One warm summer day, after finally receiving her travel permit and proper paperwork to make the trip, Katie stepped off the airplane in Lesscinanlo wide-eyed and eager to explore. However her efforts were soon hampered: since the country has little contact with other nations Katie did not know where various essential services were located. She read Lesscinanlo's National Constitution before visiting so she felt reasonably comfortable with her knowledge of its laws, but soon realized that the constitution was ill suited to addressing many essential aspects of daily life. For example, she understood its constitutional monarchy system of government, but was not aware that she could not ride a bicycle on main roads. Soon after arriving she sought out a place to stay but could not locate a hotel. She wanted to eat but was frustrated when she realized she was having trouble even locating a restaurant or cafe. She was eager to visit some landmarks but did not know how to exchange her dollars for the local currency, lemduos, in order to pay for transportation. Worse yet, the people around her did not seem very interested in helping her! They mostly just ignored her, and when she found a park and approached strangers asking for help they just turned away and went about their business.

Katie of course knew how to navigate daily life in the United States and in several other countries she had visited, but in Lesscinanlo her eagerness quickly gave way to frustration. Katie soon struck up a conversation with a fellow traveler who was equally bewildered, and the two of them made their way to a market to buy food. Things improved until a few days later when the two of them were stopped by a police officer who demanded to see their travel papers. The officer threatened to revoke their permits and deport them back to the United States unless they got their permits notarized by the magistrate. Confused, Katie asked why they needed to do this since they already had their documents notarized before entering the country. "It's our law ," the officer responded, "And as visitors you should know our laws before visiting. I will let you go with a warning, and in the meantime you really ought to read our Constitution," the officer said with a look of disdain as he turned to walk away. Incredulous, Katie turned to her friend with an increasing sense of despair. She had read the Constitution but it did not mention anything about getting documents notarized by a magistrate! Katie and her newfound travel companion trudged back to their hotel talking about where they might visit the next day, but scared that they would inadvertently violate a local rule or custom and end up in even more trouble as a result.

Of course this story is fictitious but for many online students the experience of logging on to an online class is not all that different from that of Katie as she entered Lesscinanlo. Friedberg (1983) states that "A critical management activity at the beginning of the year is teaching the students the classroom rules and procedures." (p. 3) Face-to-face classes, regardless of their subject matter, generally have similar initial expectations: students show up at a specific time to a specific room, sit in seats, and listen to an instructor. Even freshmen who have never attended a single college class have a general idea of what to do on the first day of school, but online courses are entirely different and carry no such set of common expectations and practices. Weimer (2014) describes a real-life scenario in which students had a very poor experience in a face-to-face class because the instructor did not make her expectations clear at the outset and the same lesson is even more relevant for online instructors.

Online courses can be entirely different from their face-to-face counterparts, and no two are administered in exactly the same manner. An online student needs to know basic information in order to succeed but unfortunately online instructors, like Barnaby with his insistence that visitors get their travel permits verified, do not always make their expectations clear. If students have previously enrolled in online courses they might expect new ones to be similar to classes they have already taken--a manifestation of cultural bias that can be somewhat difficult for students to overcome if they are not adequately prepared by their instructor. Conversely students who are unfamiliar with online classes will, like Katie, often feel lost and helpless as they click on various buttons and links on the online classroom environment just trying to get their bearings but having no idea what to expect. To solve this it is incumbent on the online instructor to establish expectations for his or her students from the outset of any online class.

Without any in-person meetings, students in an online class rely solely on the instructor and the materials he or she has provided to guide them through the work. The instructor writes the syllabus, sets the schedule, creates the assignments, and establishes the rules which helps set students on a clear path to success. In their analysis of Chickering & Gamson's work Graham, Cagiltay, Lim, Craner, & Duffy (2001) concluded that the effective online instructor must engage in habits that communicate high expectations in order for good education to take place. Online students need to know what their instructor expects of them in terms of participation, collaboration, and even where to turn in their homework and other documents. Students need to know what to expect of their instructor much in the same way it would have behooved Katie to learn a bit more about Barnaby and his rules and regulations before visiting Lesscinanlo. Roberts, Gentry, & Townsend (2011) found that "Students desire initial orientations wherein consistent expectations and guidelines are set forth and followed" (p. 4) and setting these expectations right at the outset of an online course can go a long way towards creating an engaging and compelling online course experience.

3. Consistency
Effective online instructors should be consistent and reliable throughout the duration of their class in all aspects of course administration. One rule of thumb is to adopt the motto "Do what you say you will do" and consistently follow through with policies established from the beginning of the course. Along the same line, many instructors also practice the longstanding business practice of "Under-promise and over-deliver." For example if the syllabus states that homework is going to be graded within one week, then it needs to be graded within one week. If an instructor says that student emails will be responded to within 48 hours, then he or she has an obligation to answer within that timeframe. Alternatively, if an instructor thinks he or she will be able to respond within 24 hours it would still be wise to put 48 hours on the syllabus as a way to build in a buffer while still fulfilling student expectations. Friedberg (1983) emphasizes the importance of "self-management" in creating an effective classroom, and specifically points out instructor consistency as a key element of this practice. Tobin, Mandernach, & Taylor (2015) note that "meaningful, consistent instructor interaction is an ongoing essential of effective online learning." (p. 48) A lack of consistency sends a message to students that the course is not a priority for the instructor, which then in turn leads to the students not placing it as a high priority in their own lives."

Boettcher (2011) offers practical strategies for effective online instructors such as being present with the class multiple times each week with discussion board posts and news items, but these activities can end up taking far more time than one might think. Due to myriad pressures of academia such as research, publishing, service, committee assignments, and other issues besides teaching that take up time in the life of a collegiate

instructor, it is not always possible to be entirely consistent with everything set forth at the outset of an online class. Occasionally homework needs additional time for proper assessment and feedback, or a weekly news update might get missed due to unforeseen circumstances. In these instances it is important to address the inconsistency head-on and not make excuses, as this sets a double standard and sends a message that it's acceptable for an instructor to fail to meet deadlines while students are expected to always complete their work on time. If an instructor expects certain thresholds of performance and quality from his or her students, then students are within their right to expects the same thing from their professor.

Much like the start of any face to face semester or school year, most online courses have a flurry of activity and excitement from their instructor as well as students during the first few days and weeks. As time passes this level of student engagement inevitably wavers, but an effective online instructor must remain resolute. "The instructor sets the tone for the online learning community early in the course and maintains it until the final class." (Savery, 2006, p. 148) Whatever precedent has been set forth during the first week should be met throughout the duration of a course, and failure to do so will have dramatic consequences for the instructor in addition to his or her students especially since, as Savery mentions, students take their lead from, and follow the example of, their instructor. (p. 148) The impact of an inconsistent instructor on his or her students is far greater than in a face-to-face class as there is no daily interaction or personal connection to hold everything together.

4. Organization
Every individual has his or her own methods for organizing information, similar to how people have different approaches for storing and ordering physical objects in their lives. Brophy (1983) states that in order for a classroom to function as a successful learning environment it must be organized, planned, and scheduled. These elements are critically important in an online class because students need to know what information to access, when to access it, and how to progress to the next goal or objective once a given reading, discussion, assignment, or exam is complete. Online course materials (syllabus, videos, assignments, discussion boards, etc.) need to be presented in a logical manner which makes sense not just to the instructor but also to the students. In a face-to-face class an instructor does not necessarily need to have the same level of organization due to the interactive and ongoing nature of the class. He or she can explain content, assignments, and even course policies to students in person, help them make sense of any idiosyncrasies or alterations, and show students how to access the materials and tools they need. Online students, who do not have this same type of continual in-person interaction, need to have a clear sense of where information is located, how to locate any required documents and course modules, and how to progress from one learning objective to the next.

Online classroom Learning Management Systems (Brightspace, Blackboard, Canvas, etc.) have tools in place to facilitate a variety of organizational methods, and many of these LMS platforms operate using a hierarchical system not entirely dissimilar from the way files are stored on personal computers. Videos, documents, handouts, and other materials are stored in virtual bins called Modules, and each Module can contain additional Modules as well. While each online instructor takes his or her own unique approach to organizing documents and materials, it is important to use some type of logical structure or order to everything such that the presentation of all the content is not a barrier to student success. It is not uncommon for inexperienced online instructors to simply upload all the necessary documents, readings, assignments, handouts, and videos into one Module without any greater sense of organization. While this might seem like an easy route in the beginning it can quickly lead to frustrations and hassles for confused students who expect some type of organizational structure to their coursework.

One important but often overlooked aspect of online class organization is that or orientation: instructors should have a method in place to help students understand the structure of class from the first time they access it (Burmester, Metscher, & Smith, 2014). Many instructors use tools like Jing, Screencast-o-Matic, or Camtasia to create short screen-capture videos that show students how to navigate their online classrooms, find information and documents, and submit assignments. Others create brief PowerPoint presentations using screenshots from their online class. Recall the story of Katie and her visit to Lesscinanlo: if she had a map or guide she would have had a better sense of where to go and how to get the information she needed. Unfortunately many online students find themselves in a similar predicament because their instructors have

not given them any sort of overview or guide to the online class so they find themselves lost and confused which is a contributing factor to the relatively high attrition rate of online classes.

5. Relationships
Students thrive on personal interactions (Perry, Mercer, & Nordby, 2010) and in a face-to-face class these interactions happen naturally as students talk with others before and after class, engage with their instructor, and work outside of the classroom on homework and projects. Students also learn more about their instructor's personality, habits, and personal interests throughout the semester and, depending on the size of class and methods used to teach it, a face-to-face instructor can learn quite a bit about his or her students as well. According to Keddie (2007), "Mutually respectful student-teacher relationships are central to improving educational experiences" (p. 254) and online classes are no different. In an analysis of the Gallup-Purdue Index Report, Carlson (2014) found that college graduates "had double the chances of being engaged in their work and were three times as likely to be thriving in their well-being if they connected with a professor on the campus who stimulated them, cared about them, and encouraged their hopes and dreams." Many face-to-face instructors build these types of relationships naturally by chatting with students before, during, and after class as well as during office hours, lab sessions, or even by running into each other on campus. However, without a built-in avenue to facilitate these types of interactions that build personal connections, it is up to the online instructor to take the lead in providing a platform by which he or she can build healthy professional relationships with students and also help them get to know each other.

Some online instructors include assignments at the beginning of their classes ostensibly to build relationships and establish respectful personal connections, but a single task and accompanying deliverable does not create healthy substantive relationships. Relationships between instructor and students, as well as between students and each other, are built over time through repeated interactions. In traditional face-to-face classes this happens naturally due to proximity-based interactions such as conversations with seatmates, group work, and study sessions through which students learn about their classmates, make friends, and discuss ideas. Online class interactions are fundamentally different due to the physical distance that separates students as well as the media through which students interact with each other and their instructor, but that does not mean that meaningful relationships cannot be built. There are several methods that online instructors can use to build relationships such as:

- **Virtual office hours** using chat or videoconferencing functions built in to many LMS platforms, or tools such as Zoom or Skype. In addition to helping with coursework and answering questions, virtual office hours are a way for the instructor to interact on a personal level with students and are one of the best ways to build relationships and let students know that the instructor cares about them and their success.
- **Webcam videos** posted as weekly updates for the class. These informal on-the-spot recordings send a message to students that the instructor is continually invested in the class while also letting students see a glimpse into their instructor's life outside the classroom. Informal webcam videos are extraordinarily valuable in creating personal connections and helping students feel a bond between themselves and their instructor and often lead to a greater personal investment in the class on the part of the students.
- **News updates** that also include non-class items. In a news update about an upcoming project due date or exam, an online instructor could also mention local community events, sporting events at the university, or even something from popular culture or their own personal lives. These are the types of things that often get brought up in a face-to-face class but are too often missing from online classes, and they go a long way towards helping students see their instructor as not a faceless instructor with a real human being with interests outside of class.
- **Discussion boards** where topics from class are explored, as well as an "Anything goes" forum where an instructor can interact with his or her students about non-class items and events. When an instructor engages on discussion boards it often helps students stay more active as well, and serves to let students see that their opinions and insights matter to the instructor.
- **FlipGrid** which is a video-based discussion platform developed by the University of Minnesota and available to any instructor to use for free. It allows instructors and students to have asynchronous discussions via short video clips, and enhances traditional discussions with the human elements of vocal tone, body language, and even the setting in which a given video is recorded.

Orso & Doolittle (2012) asked their students at Ann Arundel Community College to "name three characteristics of an outstanding online teacher and explain why those characteristics are important" (p. 1) and their 624 responses showed an interesting trend:

- Communication/availability: 66 percent
- Compassion: 58 percent
- Organization: 58 percent
- Feedback: 45 percent
- Instructor personal information: 18 percent
- Other (e.g., knowledge, technical competence, creativity): <10 percent

The most important characteristics of outstanding online teachers had little to do with technical expertise and content area knowledge but instead focused on the soft skills that are built on a foundation of healthy professional relationships between online instructors and students. These findings are in line with those of Delaney et al. (2010) whose qualitative study of online students at a Memorial university yielded the following traits when students were asked to describe the qualities that they perceive in effective instructors.

1. Respectful
2. Responsive
3. Knowledgeable
4. Approachable
5. Communicative
6. Organized
7. Engaging
8. Professional
9. Humorous

Roughly half of these characteristics (emphasis added) are directly related to a sense of positive relationships between instructor and students, and these do not happen automatically. An online instructor needs to find ways of intentionally creating pathways to healthy teacher/student and student/student relationships in order to draw students in to the class, help them feel more engaged with the material, and personally invested with their instructor and classmates.

Conclusion
Through all of this the importance of other elements such as rich content area knowledge, well-designed delivery methods, appropriate assignments that align with course outcomes, and assessments that accurately let students demonstrate mastery should not be overstated. There is a tendency in modern online education to focus more on these items and less on elements such as communication, expectations, consistency, organization, and relationships that might be seen as having secondary importance. However it is precisely these items that separate underperforming online classes from truly engaging learning environments.

References

Boettcher, J. V. (2011) Ten best practices for teaching online. Quick guide for new online faculty. *Designing for Learning 2006 - 2013*. Retrieved from http://www.designingforlearning.info/services/writing/ecoach/tenbest.html.

Burmester, L., Metscher, D., & Smith, M. (2011) Analysis of contributing factors to high attrition rates in online educational programs. *International Journal of Professional Aviation Training & Testing Research, Vol. 6*, Issue 1, 1-17

Brophy, J. (1983) Classroom organization and management. *Elementary School Journal, 83:4*, 264-285.

Carlson, S. (2014, May 6). A caring professor may be key in how a graduate thrives. *Chronicle of Higher Education.* Retrieved from http://www.chronicle.com/article/A-Caring-Professor-May-Be-Key/146409

Chickering, A., & Gamson, Z. (1987) Seven principles for good practice in undergraduate education. *AAHE Bulletin*, 2-5.

Delaney, J., Johnson, A., Johnson, T., & Treslan, D. (2010) Students' perceptions of effective teaching in higher education, *St. John's, NL: Distance Education and Learning Technologies*.

Freitas, F., Myers, S., & Avtgis, T. (1998) Student perceptions of instructor immediacy in conventional and distributed learning classrooms, *Communication Education, 47:4*, 366-372.

Freidberg, J. (1983) Consistency: The key to classroom management. *Journal of Education for Teaching, 9:1*, 1-15.

Graham, C., Cagiltay, K., Lim, B., Craner, J., & Duffy, T. (2001) Seven Principles of Effective Teaching: A Practical Lens for Evaluating Online Courses. *The Technology Source*, March/April 2001. Retrieved from http://ts.mivu.org/default.asp?show=article&id=1034.

Guo, P., Kim, J., & Rubin, R. (2014) How video production affects student engagement: An empirical study of MOOC videos. *L@S,* March 4-5, Atlanta, GA. http://dx.doi.org/10.1145/2556325.2566239

Keddie, A., & Churchill, R. (2005) Teacher-student relationships. *Teaching middle years: Rethinking curriculum, pedagogy and assessment.* Allen & Unwin, Crows Nest, NSW, 211-225.

Lederman, D. (2018) Online Education Ascends. *Inside Higher Ed*, November 7, 2018. Retrieved from https://www.insidehighered.com/digital-learning/article/2018/11/07/new-data-online-enrollments-grow-and-share-overall-enrollment

Orso, D. & Doolittle, J. (2012) Instructor characteristics that affect online student success. *Faculty Focus,* November 2, 2012. Retrieved from http://www.facultyfocus.com/articles/online-education/instructor-characteristics-that-affect-online-student-success/

Perry, N., VandeKamp, K., Mercer, L., & Nordby, C. (2002) Investigating teacher-student interactions that foster self-regulated learning. *Educational Psychologist, 37:1*, 5-15.

Roberts, J., Gentry, D., & Townsend, A. (2011) Student perspectives: Evaluating a higher education administration program. *Journal of Case Studies in Education.*

Savery, J. (2005). Be VOCAL: Characteristics of successful online instructors. *Journal of Interactive Online Learning*, 4(2), 141-152. Retrieved from http://www.ncolr.org/jiol/issues/pdf/4.2.6.pdf

Scott, M. & Nussbaum, J. (1981) Student perceptions of instructor communication behaviors. *Communication Education, 30:1*, 44-53.

Shi, Ningning; Du, Chen; Jiang, Xiaonan; and Bin Saab, Hala M., (2011). Online Versus Face to Face College Courses. *MBA Student Scholarship*. Paper 1.

Tobin, T., Mandernach, B. J., & Taylor, A. (2015) *Evaluating Online Teaching.* San Francisco: Wiley.

U.S. Department of Education, National Center for Education Statistics. (2016). *Digest of Education Statistics, 2015,* Table 311.15.

Weimer, M. (2014) She didn't teach. We had to learn it ourselves. *Faculty Focus*, September 10, 2014. Retrieved from http://www.facultyfocus.com/articles/teaching-professor-blog/didnt-teach-learn/