Using the 7 Principles in Online Classes – Are They Still Valid?

Introduction

As technology and broadband Internet access become more commonplace in student's lives, online classes have become more popular. In 2004, there were over 2.35 million students enrolled in web-based online classes; by 2025, that number could explode to 40 million online students globally (Bangert, 2008). With the rapid growth of online classes, instructors and institutions must be sure to consider the quality of the online learning experience they offer. With the rapid change in the number of web-based classes and the growing popularity that has lead more institutions to offer them, there has been some concern that the quality of these courses has been relegated to the back burner (Bangert, 2004).

The Seven Principles in Online Classes

Created in 1987, Chickering & Gamson's *Seven Principles for Good Practice* were designed to provide a framework for undergraduate education. These seven principles are that good practice in undergraduate education (1) encourages contacts between students and faculty, (2) develops reciprocity and cooperation among students, (3) uses active learning techniques, (4) gives prompt feedback, (5) emphasizes time on task (6) communicates high expectations, and (7) respects diverse talents and ways of learning (Chickering & Gamson, 1987, p. 2). These were not meant to be definite laws, but guiding principles to improve undergraduate education. Chickering & Gamson explained that "the different ways different institutions implement good practice depends very much on their students and their circumstances" (1987, p. 3). Although they were originally designed for traditional classroom instruction, the flexibility of implementation and use makes it possible to apply them to the online classroom as well. For each of these seven principles, I ask two questions – "Why is this important?" and "How can it be implemented in an online class?"

Faculty – Student Contact

Chickering & Gamson (1987) suggested that a strong connection to their instructors contributes to student motivation and involvement. In an online class the instructor must be approachable and supporting, not merely a source of data (Newlin & Wang, 2002; Bangert, 2004). There is an old tech joke about replacing someone with a "very small shell script", a program that can take a file or user input and does pre-defined manipulations. Online students should never feel like their instructor has been replaced with a mindless program! In comparing their online classes to face-to-face classes, Newlin & Wang suggest that it requires more work to create a connection with students in their online class (2002). Online instructors cannot rely on non-verbal communication – facial expressions, eye contact, or gestures, to communicate with students. In the absence of physical presence, it is more important for the instructor to have a strong virtual presence. Surveys of online students suggest that this principle is one of the most important to students (Hathorn & Hathorn, 2010; Bangert, 2008).

There are many options for communication and contact between students and faculty in online environments. While they may not be as powerful as face-to-face communication, the sheer number and variety of tools give instructors and students a great deal of flexibility. An obvious option to initiate contact would be a biography of the instructor, including professional experience, any publications, and education. Some suggest including a photograph of the instructor with the biography to help students put a face to the name (Suen, 2005; Hathorn & Hathorn, 2010). Instructors should also have their communication policy clearly posted on the course homepage or syllabus. This communication policy should include information regarding communication channels (email address, phone call, instant message) and the instructor's timeline for replies (Graham et al., 2001). Some institutions set the reply timeframes in the faculty contract, so the instructor's personal policy should match or improve upon those requirements. Email is by far the most common and easily used tool for communication, so instructors must be vigilant in monitoring and replying to emails.

Some instructors have virtual "office hours" using webinar software, such as WebEx or GoToMeeting; chat rooms, or instant message software. These allow the students to interact with the instructor on a less formal basis; instructors have a chance to interject humor or a more "human" voice to their interactions with students (Newlin & Wang, 2002). Newlin and Wang also found that regular online meetings allowed them to quickly identify and clear up any misconceptions that students had (2002). Other options for instructor-student contact include announcements to the entire class for reminders or schedule changes, email, discussion boards or forums, chat rooms or instant messaging (Suen, 2005). Instructors should try to use as many forms of contact as feasible within their classes.

Cooperation Among Students

"Good learning, like good work, is collaborative and social, not competitive and isolated" (Chickering & Gamson, p. 3). Cooperation and collaboration between students allows them to share their experiences, ideas, and interpretations with their peers, and benefit from theirs in return. Students invest more of their time and themselves in the class, and are then more involved (Hathorn & Hathorn, 2010). Newlin and Wang (2002) suggest that student collaboration may be more important in online classes than traditional face-to-face classes. In online classes, there is no other contact with their peers; they can't glance around the room to see if others look like they got the lesson, or are struggling, or ask a quick question on their way out of the room. Without student cooperation and collaboration built into the fabric of an online class, students risk being isolated and less involved.

Ideally, students should have the option for both synchronous and asynchronous communication with their peers (Suen, 2005; Newlin & Wang, 2002). Discussion boards tend to be the most common form of asynchronous communication. Some courses include weekly discussions as part of the lesson for the week; this gives students the opportunity to share their ideas as well as demonstrate their understanding of the material (Suen, 2005; Bangert, 2004). Students could work individually on these discussion posts, or in groups or teams to present or debate an idea. With discussions, instructors should provide guidance and expectations for "quality over quantity" of posts (Hathorn & Hathorn, 2010).

Group projects are also an option for online classes. These can include presentations, writing assignments or discussion posts, but the results of the group work should always be a deliverable 'product' that can be assessed (Suen, 2005; Graham et al. 2001). These would encourage students to

process, evaluate, and apply course material, use critical thinking skills, and improve communication (Suen, 2005).

Collaboration is not a perfect tool. Some course subjects may not lend themselves well to student collaboration. In those cases, instructors should look for other options, such as peer reviews, or allow open discussion boards or chat room access where students may form online study groups or share information about assignments and lessons. Students and instructors have also expressed concern about the level of personal accountability in group work (Bangert, 2004). Some students are able to coast through the projects, allowing their peers to do all the work. If this is a concern, instructors should consider monitoring student interactions or having students each send in a summary of their activities within the team.

Active Learning

Chickering and Gamson observed that "students do not learn much by sitting in classes, listening to teachers, memorizing pre-packaged assignments, and spitting out answers (1987, p 4). For online classes, students do not learn much by reading notes or Power Points, completing pre-packaged assignments, and spitting out answers. The constructivist theories that the Seven Principles is based in argues that students learn more when they are actively building their knowledge through participation in authentic, real-world activities (Bangert, 2004). Students learn more when they analyze, evaluate, synthesize and apply their knowledge.

Assignments and projects should mirror realistic problems that students may encounter in the field. For example, a graduate Educational Statistics class included assignments on calculating an analysis similar to the Adequate Yearly Progress reports required by "No Child Left Behind" (Bangert, 2004). Active learning can also involve role-playing; mimicking scenarios that the students may have encountered previously or are likely to encounter in the real world (Henninger & Hurlbert, 2006).

The ways to implement active learning in online classes is truly limited only by the technology available and the instructor's creativity. Students can participate in challenging discussions, team projects,

or peer critiques or evaluations (Chickering & Gamson 1987; Suen 2005; Newlin & Wang 2002). Students could use blogs as class journals, reflecting about how the course material matches with their own experiences (Henninger & Hurlbert 2006). This would allow instructors to identify points where more explanations or information is needed, as well as view the evolution of the students' understanding of the material. There are countless other interactive tools available on the Web that could enhance the student learning experience, including simulations and other apps, blogs, wikis and social networks (Bangert, 2004; Hathorn & Hathorn, 2010).

Prompt Feedback

"Assessment without timely feedback contributes little to learning" (Chickering & Gamson 1987, p. 4). Students need frequent opportunities to demonstrate their knowledge and understand, receive suggestions for improvement and praise for what was done well. Without knowing what they understood correctly and what was incorrect, students will be wandering around blind and without guidance. Frequent performance feedback increases a student's self-confidence and self-assessment skills (Bangert, 2004). With these skills, students are more likely to identify what they know and what they don't understand, leading them to study more effectively. The confidence and satisfaction with their progress will likely increase their motivation to continue on their educational journey.

Online classes may make providing prompt, frequent feedback easier for instructors. At the start of each term, instructors can use online tools to monitor student activity. Newlin & Wang (2002) identified a strong correlation between the number of times a student accessed the course home page in the first week of classes and their final grade in the class. If the instructor notices a student has been slow to start, he can contact them directly to help identify and resolve any problems or confusion (Bangert, 2004). Contact does not need to be initiated by the student if the instructor notices a problem or lack of understanding. Instructors should also make it easy for students to get timely answers to their questions by being available via email, phone, instant message or other means (Suen 2005). When discussing feedback, most immediately think of the scores for assignments and tests. While it is easier to just note down a score, instructors should ideally offer detailed evaluative and corrective feedback for assignments (Bangert, 2004). For tests, most LMS's offer instant grading of all question types except for short answer. This could be used to allow students to take practice quizzes and view instant results to measure their understanding of the topic. Instructors can also make an online grade book available to students (Bangert, 2004). Students would be able view their grades and progress through the course at any time.

Time on Task

Time isn't money; time is knowledge. It's important for students to spend time working within their online class, communicating, reading, composing, interacting, *doing*. Time on task is directly involved with maintaining student involvement in the course (Newlin & Wang 2002; Bangert, 2004). Despite being a descendant of that original model, online courses are not correspondence classes (Graham et al., 2001). Correspondence classes allowed the students to do the work and send it in on their own timeline. Online classes must have regular deadlines to keep students on task and moving towards the completion of assignments and activities (Bangert, 2004). While some argue that online classes should offer students flexibility, especially those dealing with family or work obligations, there still must be some structure.

The flip side of this is that students should not be wasting the time in their online class looking for their course material, assignments or information. Online classes must be well-organized and easy to navigate (Bangert, 2004). Information should be easy to find. A good idea is to have a department- or institution-wide template for online classes, with well-defined standards of what information should be where. This would make it possible to have a guide or orientation for new students and reduce the learning curve for new classes.

Instructors can encourage students to devote an appropriate amount of time to complete their work several ways. One of the simplest is a course schedule of activities and assignments (Bangert, 2004;

Suen, 2005). This could be part of the course syllabus or on a calendar available to students. Having a visible schedule of activities encourages students to develop strong time management skills (Suen, 2005). Instructors can also send out regular announcements or emails to remind the students about upcoming due dates, or encourage them to start various phases of a large project (Suen 2005; Ford, 2002). There should be regular, graded assignments throughout the term, rather than having the bulk of the work clustered within one or two weeks of the course (Henniger & Hurlbert, 2006; Newlin & Wang, 2002). These could be weekly discussions, quizzes, writing assignments, or progress reports on a semester-long project.

High Expectations

A common motivational phrase is "Reach for the moon, even if you miss you still land among the stars" That can apply to the expectations of an online class; if you expect more from learners, they will most likely rise to the occasion and meet those expectations. Higher education offers a number of honors, however Chickering & Gamson (1987) suggested that the day-to-day high expectations that students and faculty have for themselves and one another has a greater affect in motivating students than singular events such as the Dean's List or honor societies. Instructors must make students aware of these expectations and support students as they strive to achieve them.

Instructors can communicate their expectations at the start of class by including the course objectives and goals, academic honesty policy and other standards of behavior in the syllabus or initial course content (Suen, 2005; Newlin &Wang, 2002). These should be the same sort of expectations that instructors would have for traditional face-to-face classes. Instructors can also include the lesson objectives at the start of each section, so students are able to see from the beginning what they should gain by the end of the lesson. Rubrics are also a useful tool for detailing high expectations (Ford, 2002). These break down the components and levels of various assignments or projects and provide detailed descriptions of what is needed in order to achieve those levels. Assignments should also be challenging for students, pushing them to higher levels of achievement without being impossible (Graham et al., 2001). Feedback should also emphasize expectations by pointing out where students succeeded and in what areas they would need to work harder.

Respect for Diverse Ways of Learning

Everyone in the class, students and instructors alike, has unique experiences, viewpoints and talents. Student's prior knowledge, learning styles and demographics should be taken in to account (Bangert, 2004). In many ways, online classes have an advantage in implementing this principle. The web can serve as a "democratizer", where student's posts and submissions are judged on their own merit rather than the students' physical appearance, ability or disability (Newlin & Wang, 2002). Differences in students' economic status or social confidence levels are also minimized.

Instructors can also allow for diverse ways of learning in the organization and setup of their course. The website and material should be accessible for students with disabilities, including transcripts of audio or video and content that would be software-readable. In order to support both the visual learners and the verbal learners, the course content should contain as many types of media as feasible (Bangert, 2004). This would include text, images, diagrams, video, audio, and interactive apps. Additional resources, such as links to related web sites, journals, government reports or professional organizations are also helpful to allow students to find more information on topics that interest them or that they had trouble understanding (Suen, 2005; Newlin & Wang, 2002). Students can also easily go back and review material from previous lessons without interrupting the flow of the class or being considered slow by their peers (Suen, 2005).

Instructors should also provide more than one channel for students to contact them for assistance (Suen, 2005). Some students may be comfortable trying to explain their question or problem via email. Others may benefit from being able to call the instructor and speak with them on the phone. Some may be able to consult with a small group of their classmates to find an answer to their problem. Since all students have distinct abilities and learning styles, instructors must be flexible and not try to implement one-size-fits-all solutions.

From examining how the Seven Principles can be implemented in online classes, it is clear there is a significant amount of overlap. These are not seven distinct components. "The dimensions of effective teaching originally described for face-to-face classroom settings by Chickering and Gamson's framework have different causal relationships when applied to online learning environments" (Bangert, 2008 p. 43). In online courses, many course components or activities will correspond to multiple principles.

Evaluation using the Seven Principles

After over twenty years since they were published, we must ask - "Are these principles still valid?" A brief survey of our students and faculty at Northwest State Community College suggests the answer is yes. The survey was comprised of six questions relating to each principle, five questions rating components of a course from "completely unimportant" to "critically important" on a 5-point scale and one open response question asking them to provide any additional thoughts on that principle (Appendix I). The principles that received the highest ratings for importance were (4) Prompt Feedback with an average score of 4.47 (SD=0.78), (6) High Expectations with a score of 4.42 (SD=0.86) and (7) Respect for Diverse Ways of Learning with a score of 4.23 (SD=0.90). The principle that received the lowest ranking was (2) Cooperation Among Students, with a score of 2.93 (SD=1.05). This was expected at the community college level; many of the courses are skill-based, which would not include much opportunity for collaborative work. Even then, the results indicate a strong divide. In courses that can benefit from collaboration and cooperation, it is still considered important. These results indicate that, while not perfect for all courses, the Seven Principles of Good Practice are still very relevant for today's online classes.

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Appendix I: Northwest State Community College Seven Principle Survey Results

n=45, Survey dates 5/16/2012 - 5/28/2012 of students and faculty who have participated in online courses for Spring 2012 or Summer 2012 terms.

Question	Completely Unimportant	Mostly Unimportant	Somewhat Important	Fairly Important	Critically Important	Mean	SD
	1	2	3	4	5		
The instructor posts a brief biography, including how long they've been teaching, any professional experience, and degrees.	2	7	18	12	6	3.29	1.04
The instructor posts a photo of themselves, so students can attach a face to the name.	7	15	10	9	4	2.73	1.21
Instructors offer weekly online "office hours" using a chat room or webinar, where they are available to answer questions, give advice, or discuss the readings or assignments.	0	3	9	18	15	4.00	0.90
When students email the instructor, they receive a reply within 48 hours.	0	0	0	4	41	4.91	0.29
If the class requires discussion board posts, the instructors reply to the posts, praising good points, asking questions, and encouraging deeper thought.	0	2	12	16	15	3.98	0.89
Principle 1 Total	10	29	52	63	68	3.68	1.17
There's a "Student Lounge" discussion board, where students can talk unofficially.	0	15	18	10	2	2.98	0.87
Students who are online at the same time can talk together using a chat room or instant message.	2	11	15	15	2	3.09	0.97
Students work together in the class to complete a group project or paper.	7	11	11	12	4	2.89	1.23
Students form and post group discussions on the discussion boards, simulating debates.	3	6	21	11	4	3.16	1.00
Student profiles are visible in the class and include contact information and a photo.	9	14	15	6	1	2.47	1.04
Principle 2 Total	21	57	80	54	13	2.92	1.05
The class uses Web 2.0 tools such as blogs or wikis.	8	11	15	10	0	2.61	1.04
The instructor includes images, video and audio in the Course Content, in addition to the notes or lecture material.	2	4	9	15	15	3.82	1.13
Students have the opportunity to apply what they're learning to a real-life issue.	0	1	12	17	15	4.02	0.84
Students are required to analyze or critique one another's work. (peer evaluations)	5	8	18	12	2	2.96	1.04
The Course Content includes or links to interative apps or websites relating to the current lesson.	2	2	10	22	9	3.76	0.98
Principle 3 Total	17	26	64	76	41	3.44	1.14

Scores for tests and assignments are available within a week of the due date.	0	0	2	12	31	4.64	0.57
Instructors provide constructive comments in addition to scores.	0	2	1	11	31	4.58	0.75
Practice or sample quizzes are provided to allow students to prepare for the test. These would not count towards the class grade.	0	2	10	14	19	4.11	0.91
Instructors include their timeframe for replying to emails and returning scores on the Syllabus.	0	2	6	12	25	4.33	0.88
After the test due date has passed, students are able to see which questions they got wrong and what the correct answer is.	0	0	3	12	30	4.60	0.62
Principle 4 Total	0	6	22	61	136	4.45	0.78
The syllabus mentions the minimum amount of time students should expect to spend on the class in a week.	1	10	8	17	9	3.51	1.12
The instructor provides a schedule of activities, either within the syllabus or on the course calendar.	0	0	2	15	28	4.58	0.58
There are weekly assignments, discussion board posts and/or quizzes.	0	2	14	13	16	3.96	0.93
Instructors post regular reminders about upcoming due dates.	2	3	15	12	13	3.69	1.10
Students are expected to log in to their online class at least 3 days a week.	2	6	11	14	12	3.62	1.15
Principle 5 Total	5	21	50	71	78	3.87	1.06
The course objectives are clearly listed in the syllabus	1	0	4	9	31	4.53	0.84
Unit or chapter objectives are listed under Course Content for each module	1	1	8	12	23	4.22	0.97
Rubrics are provided for large projects or papers.	1	0	2	16	26	4.47	0.79
Rubrics are provided for discussion board posts and most assignments.	1	2	8	13	21	4.13	1.01
Instructors hold students to high standards of performance, academic honesty and professional conduct.	0	0	1	14	30	4.64	0.53
Principle 6 Total	4	3	23	64	131	4.40	0.86
Throughout the term, there are multiple ways for students to demonstrate their knowledge of the subject (tests, writing assignments, discussions)	0	0	4	18	23	4.42	0.66
Orientation sessions and technical help are provided for students who are not as comfortable with computers.	0	2	10	11	22	4.18	0.94
Students are allowed to select their topics for papers, as long as it matches the instructor's guidelines.	3	1	5	15	21	4.11	1.13
Students are allowed and encouraged to share opinions and experiences that may be different from the instructor's.	0	1	6	15	23	4.33	0.80
Instructors are willing to adapt the course to match the students' needs.	0	1	13	15	16	4.02	0.87
Principle 7 Total	3	5	38	74	105	4.21	0.90