

SMCCCD Distance Education Guidelines

Draft

Distance Education Advisory Committee (DEAC)

September 2007

This draft was modeled on the most recent draft of the Distance Education Policies being developed at Mt. San Jacinto College by permission.

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SMCCCD Distance Education Guidelines

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Introduction

Cañada College, College of San Mateo, and Skyline College, the three colleges in the San Mateo County Community College District (SMCCCD) will support a distance education program that consists of courses offered completely online or partially online (hybrid). Use of technology by tele-courses and traditional face-to-face courses will also be considered in this planning effort, where appropriate. This document describes the philosophy and policies that determine the methodologies used to offer distance education courses at SMCCCD, while allowing for flexibility in the planning, development, and implementation of any such course offerings as technology and the college progress.

Definitions

Title 5, Section 55210 states that districts should maintain records and report data on courses with at least 51% of the hours of instruction delivered via technology when the instructor and students are separated by a distance. At SMCCCD, as in many other districts, the actual amount of instructional hours spent in distance mode spreads across a spectrum.

The table below identifies descriptive terminology used throughout this document and in the marketing of the program as well as reporting and budgeting for distance education. The term *technology mediated education* will be used primarily in reference to faculty and staff training.

| Descriptor | Definition | Processing | Notes: |
|---------------------|--|--|---|
| Fully Online | Courses that are completely online; they may have proctored testing set up according to needs of particular discipline areas, but students do not have to come to the SMCCCD colleges. | Fully online courses require a separate approval process by our curriculum committee via an addendum procedure. (See Appendix 1: Regular Effective Contact Policy and DE Addendum) | May require faculty readiness standards be met prior to online teaching. |
| Hybrid (Blended) | Any course that substitutes face-to-face hours with online work and has some regularly scheduled class meetings. Number of online/face to face hours are set at the discretion of the discipline experts. | Hybrid courses will also require an addendum be submitted to the curriculum committee. | If less than 51% of the course is online, the course will not be counted as distance education for reporting purposes until such time as the DE Guidelines from the System Office are amended to include hybrid courses in the reporting process. |
| Web Mediated | Face-to-face courses that require the student to access the Internet as part of the course work. | These courses will at a minimum declare the required online use in the course syllabus, and preferably be announced in the class schedule | This definition will be used for staff development planning and may be seen by students if needed. |
| Technology Enhanced | Courses which may use the web in face-to-face presentations, students may be asked to do online/library research, presentations may be digital. Access to technology by students is expected but not required. | No special processing is required for this type of course. | This definition will be used for staff development planning. |

SMCCCD Distance Education Program Standards

SMCCCD faculty are encouraged to apply the following standards when developing distance education courses, as these standards will be used when evaluating the growth and success of the programs herein described.

Administrators should view these standards as clear objectives necessary for student success. As faculty develop courses that will be offered in fully or partially online methodologies, they should be aware of these standards as their rubric for success, as well.

For any distance education program to be successful, all constituencies involved must agree about their roles in the program development, implementation and maintenance processes. Collaboration and consensus regarding the decisions confirmed in the resulting documentation are essential.

These standards are divided into the following areas: Institutional Support, Program and Course Development, Technical Program and Course Development, Faculty-Related Issues, Student Support, and Teaching and Learning Standards.

Institutional Support Standards

- That the delivery technology for the courses be as stable as possible.
- That a procedure be in place to ensure continual monitoring of all technical systems related to online program delivery.
- That a centralized system provide support for building and maintaining the DE infrastructure, such as web space and course management system access.
- That training for faculty, staff and administrators be provided.

- That reasonable hardware and software needs for faculty discipline area experts and course implementation be provided.
- That student support services at a distance be provided, including library, counseling, bookstore, orientation and tutoring and enrollment services.
- That communication systems for informing and orienting students to distance learning be in place.
- That schedule and catalog copy be easily accessible for students seeking distance learning opportunities.
- That support for course development be available, particularly in the area of accessibility compliance.
- That actual hours spent in distance education mode be clearly documented.

Program and Course Development Process Standards

Determination and Approval of DE Course Offerings

The Curriculum Committee will use the following criteria when determining whether a course will be approved for online delivery:

- Students will benefit from having access to the course via a distance offering.
- The Course Outline of Record has been approved or revised within the three years of DE addendum request for approval.
- A DE addendum has been submitted to the Curriculum Committee adequately designating the following:

1. Sufficient consideration has been given to adaptations of methods of instruction and methods of evaluation to ensure regular and effective contact as required in Title 5 and the proposed SMCCCD Regular Effective Contact Policy (See Appendix 1: Regular Effective Contact Policy).
 2. Necessary technical requirements are available.
 3. Accessibility is ensured as required by Section 508 guidelines.
- All Title 5 mandates have been met and followed.
 - Class size as approved by each college's Curriculum Committee and documented on the Official Course Outline of Record. It is suggested that the first time a course is offered by a particular instructor, that the instructor be given the option to set the maximum at 20 students.
 - Courses have incorporated discipline SLO's.
 - *Articulation with CSU/UC*

Technical Program and Course Development Process Standards

After Curriculum Committee approval of the program or course for DE delivery, the following process will be followed:

- The initiating faculty member, after meeting the faculty readiness standard as outlined in this document, will begin the actual course development with the assistance of instructional support staff and a Development and Support Team (DST).
- The Faculty Support and Development Team members are selected by the faculty discipline area experts and must include at least one member of the DEAC. It's recommended that the team consist of three instructors who meet the readiness standards, one of whom must be a DEAC

member. The role of the team members is to provide the faculty discipline area experts with assistance throughout the initial development and offering of a new course. In addition, the team will review the course organization and content and assist the faculty member in meeting quality standards as outlined in this plan.

- A formative review process will take place after at least two weeks of course content has been developed for DE delivery and a general timeline has been completed. (See course standards later in this document.)
- The DST will verify that all support services that are needed for the course offering are in place (library, testing accommodations, etc.).
- The DST will verify that accessibility requirements according to Section 508 Guidelines have been met.
- At the course mid-term point, faculty member will meet with the Development and Support Team who will assist in any way that may be needed as the course develops.

Formative Course Evaluation and Mentoring

At least two weeks' worth of online course content will be reviewed and approved by the Development and Support Team prior to offering the course. The team will review the two weeks' worth of content material, course structure and tools, with a goal of completing a formative evaluation of the developing course. The team will offer suggestions and assist the faculty developer in developing a quality course.

The following areas will be considered when doing a formative review:

- Curriculum alignment

- Rigor, depth, and breadth of content
- Appropriate technical design
- Opportunities for student participation and interaction
- Variety of learning activities considerate of all learning styles
- Student assessment activities appropriate to the content

Teaching and Learning Standards

General Standards

- Distance education students will be given advance information about course requirements, expectations regarding course work standards, equipment needs and techniques for succeeding in a distance learning environment, as well as technical training and support throughout the course.
- Students will be required to be active learners in presenting, organizing, applying and constructing information, ideas and knowledge.
- All course objectives/outcomes and requirements will be clearly presented.
- Courses will maximize the opportunities for regularized and ongoing interaction between teacher and students, among students, and between students and the learning environment. Students will be held accountable for the communication activities within courses.
- The course will provide opportunities for active learning that allows students to engage and participate in activities and tasks that enhance comprehension, understanding, and knowledge.
- All student assignments and their due dates, as well as tests and test dates, will be explained and posted at the beginning of the course, or in a way to give reasonable preparation time for the student.

- Any special testing (i.e., proctoring) situation and arrangements will be clearly described to the student prior to the start of the course.
- A variety of content appropriate presentation methods will be used that address student multiple learning styles.
- Evaluation methods will be relevant to the activities, reading assignments and other learning materials presented in the course.
- Feedback to student assignments and questions will be constructive and provided in a timely manner. Instructor will commit him/herself to a clearly expressed turnaround time.
- The course documents will describe the functions of the course website to the student (e.g., how to post assignments, communicate with the instructor, etc.).
- The instructor will make frequent announcements regarding the progress and processing of the course.
- A policy for due date leniency due to institution-inflicted technical difficulties will be communicated in the syllabus or overview of the course.

Course Media and Materials Standards

- All external links and internal functionality of current course modules should be available and fully operational.
- The course content will be kept current term by term and will open by, and remain open at least until, the beginning and ending dates of the courses.
- Technology will be appropriate to the course andragogy.

Accessibility Standards

- DE courses will provide accessibility with screen readers. Images and links contained in the course website must show alternate text upon cursor contact.
- Courses will provide ample written instructions for every task the student has to perform: taking tests or quizzes, posting contributions to the on-line discussion, downloading files/software, finding supplementary reading, returning to the website, etc.

- DE students will have access to sufficient library resources that may include a “virtual library” accessible through the World Wide Web.
- Academic counseling and advising will be available to distance learning students at the same level as it is for students in on-campus environments through phone or web chats.

Privacy and Protection Standards

- To protect the integrity of the teaching/learning process in courses that do not feature a proctored test environment, the student must be required to formally acknowledge and pledge adherence to SMCCCD’s Student Conduct Policy and Acceptable Use Policy (Board Rules & Regulations 7.69, 7.71, 7.72, and 7.73).
- Procedures will be in place to help ensure security of student work.
- Students will receive clear instructions to save and retain copies of all work submitted electronically.

Program Review Standards

- An approved evaluation instrument will be provided with the course to ensure student feedback on the organization and content of the course and the instructor performance.
- Review of student outcomes will include assessment of student products and exams, as well as student evaluations of the course.
- Data on enrollment, costs, and successful/innovative uses of technology will be used when reviewing program effectiveness.
- Intended learning outcomes will be reviewed regularly to ensure clarity, utility, and appropriateness.
- Course will meet or exceed each college’s academic standards.
- Course will be reviewed on a regular basis and revisions documented by discipline faculty through the curriculum revision process required by Program Review. Instructional materials will be reviewed periodically to ensure they continue to meet program standards. Course evaluation will include: technical design, curriculum alignment, rigor, depth, breadth, student performance, and student participation and interaction.

- Peer Evaluation of the Instructor will be accomplished in alignment with current faculty evaluation process. (See appendix 3: Peer Evaluation Guidelines)

Departmental or Discipline-Specific Standards

- The course adheres to the Official Course Outline of Record.
- The course is offered with rigor, depth and breadth consistent with its FTF (face to face) counterpart.
- It is the responsibility of the discipline/department to maintain the quality of delivery of all classes offered regardless of modality.
- Student learning meets the standards set within the discipline, especially in regard to sequenced and/or transfer courses.

Faculty Issues, Requirements and Expectations

It is important to note that faculty will be allowed to grow into the implementation of distance education at their own pace and that they will be encouraged to explore best practices in education at the program, division, and college level. The administration has assured the Senate and the AFT that no faculty member will be penalized for not offering distance education courses, or forced to convert courses to the online environment. One priority at each college will be to look for candidates for new faculty hire who are willing and/or able to incorporate technology resources into their teaching and learning. Current faculty members will be given the opportunity to offer courses at a distance. During the planning phase for course offerings, faculty members are encouraged to consider for courses that help fill the gaps in distance education degree and certificate programs as well as fulfilling CSU or IGETC transfer requirements.

In accordance with Title 5 regulations, which designate online and partially online courses as equivalent in credit status with regular courses, the Administration and Faculty of SMCCCD consider distance education courses the same in content and credit as regular courses. Online and partially online course assignments will be considered equal in status to regular courses when faculty load is

considered. It is to be determined through bargaining what percentage of the instructor's load is able to be conducted in distance education mode. It is the hope of this task force that flexibility will be exercised in the development of this policy. It is also recommended that administrators responsible for faculty assignment to online courses understand that load and regular effective contact are connected issues. Having more than 120 students to teach in a given semester may negatively impact the teacher's ability to achieve regular effective contact as required by Title 5 and the SMCCCD Regular Effective Contact Policy.

If consideration is given to allowing full time faculty to teach 100% of their annual load online, it is recommended that the following policy be adopted by the Academic Senate (as a pedagogical issue) and by the AFT (as a workload issue) to ensure that regular effective contact is maintained: Courses offered fully online by a full time faculty member teaching 100% of load online, will be evaluated for compliance with all Title 5 and SMCCCD DE Policies, by the approved peer evaluation process. In addition, no overload will be allowed in this situation.

Other faculty issues that should be considered by the Senate Governing Bodies, AFT, and other shared governance bodies include but are not be limited to: virtual office hours, class size relative to working conditions, support and incentives for course development, rights of first refusal, and percentage of load online. As a general principle, faculty who developed the distance education courses would own the copy-right to the course content. With permission from faculty, the course may be taught or modified by other faculty discipline area experts.

Distance Education Faculty Readiness Standards

To ensure that SMCCCD distance education courses maintain a high standard of quality, and in recognition that experienced faculty tend to have lower attrition rates than faculty who have little experience and training, faculty who teach distance education courses will be expected to:

- Have completed a SMCCCD basic training program as defined by the DEAC; or
- Have a certificate of completion in online teaching from a reliable institution such as UCLA online teaching program or the Cerro Coso Online Educators certificate; or
- Be able to demonstrate having had a successful experience in teaching distance education at SMCCCD or another similar institution.

Educational Technology Training Plan

Training Standards

The following standards will be used to satisfy the faculty readiness component of this plan:

- Faculty may choose to satisfy the readiness standard component by attending the regularly scheduled training program offered at SMCCCD.

Action Plan

| Goal | Activity | Who | Date | Cost |
|--|---|--|-------------|------------------------------|
| DE Plan will be activated | Academic Senate Approval of Plan through normal processes | District Senate President and DEAC Co-Chairs | Fall 2007 | |
| | <i>Approval by other interested/invested parties?</i> | | | |
| Peer Trainers able to assist new development of DE | <i>Identify/Hire Trainers?</i> | <i>DEAC/Instruction Offices?</i> | | <i># of positions? Cost?</i> |

| | | | | |
|---|--|---|-------------|--|
| courses. | | | | |
| Provide development and design support | Hire at least one instructional designer. <i>Shared by colleges?</i> | DEAC and Administration <i>CTL?</i> | | <i>Cost?</i> |
| Ensure effective, efficient local CMS Support for faculty and students. | <i>24/7 Helpdesk?</i> <i>CMS Administration</i> <i>Provide email for students?</i> | <i>Trustees Administration</i> <i>ITS/CTL</i> <i>Vendor?</i> | | <i>Cost?</i> |
| Ensure that students are adequately prepared to succeed in DE courses. | Develop a student orientation to DE courses, <i>and/or require readiness class.</i> Determine if the orientations will take place ftf, online or both. | DEAC, Administration and Staff | | Orientation Development Stipend: \$3000 |
| Enable faculty to receive one-on-one mentoring. Ensure high quality DE offerings. | Determine a process for selecting the development and support team members. | DEAC | Spring 2007 | <i>Cost?</i> <i>Release time?</i> |
| Enable faculty to store course media materials. | Provide web space for learning objects and web pages. | Administration and Staff | | Available through IT servers/ KCSM <i>Cost?</i> |
| Insure secure testing situations for courses when appropriate. | Develop a process and policy for proctoring tests. <i>Identify location(s)</i> | DEAC and Administration <i>Testing Offices/ Libraries/LCTRs/ Other Staff</i> | | |
| Enable faculty to collaborate regarding DE best practices | Set up opportunities for faculty to meet on a regular basis (brown bag lunches, list serves and/or discussion forums, etc.) <i>Utilize existing worksite sharing, CCC Confer, CMS functions</i> | DEAC <i>Academic Senate</i> <i>ITS/CTL</i> | | |
| Enable faculty to produce quality media content. | Develop a timeline to purchase software <i>or</i> licenses needed, such as Camtasia, Impatica, PhotoShop, etc. | Administration in consultation with DEAC <i>ITS/CTL</i> | | <i>Cost?</i> |

Appendix

SMCCCD Regular Effective Contact Policy

Regulations:

Title 5 and the Distance Education Guidelines for the California Community Colleges state:

55211. Instructor Contact.

In addition to the requirements of section 55002 and any locally established requirements applicable to all courses, district-governing boards shall ensure that:

(a) All approved courses offered as distance education include ***regular effective contact*** between instructor and students, through group or individual meetings, orientation and review sessions, supplemental seminar or study sessions, field trips, library workshops, telephone contact, correspondence, voice mail, e-mail, or other activities.

(b) All distance education courses are delivered consistent with guidelines issued by the Chancellor pursuant to section 409 of the Procedures and Standing Orders of the Board of Governors. ***Regular effective contact*** is an academic and professional matter pursuant to title 5, section 53200.

Note: Authority cited: Sections 70901 and 66700, Education Code.

Reference: Sections 70901 and 70902, Education Code.

Guideline for Section 55211

This section defines what contact must be maintained between instructor and student:

Subsection (a) stresses **the responsibility of the instructor in a DE course to initiate regular contact with enrolled students to verify their participation and performance status.** The use of the term “regular effective contact” in this context suggests that students should have frequent opportunities to ask questions and receive answers from the instructor of record.

Subsection (b) honors the principle that for DE courses, there are a number of acceptable interactions between instructor and student, not all of which may require in-person contact. Thus, districts will need to define “effective contact, “ **including how often, and in what manner instructor-student interaction is achieved.** It is important that districts document how regular effective contact is achieved. Since regular effective contact was declared an academic and professional matter, this documentation must include demonstration of collegial consultation with the academic senate, for example through its delegation to the local curriculum committee. A natural place for this to occur is during the separate course approval process (see section 55213). Documentation should consist of the inclusion of information in applicable outlines of record on the type

and frequency of interaction appropriate to each DE course/section or session. As indicated in the *Guideline to Section 55219*, districts need to describe the type and quantity of student-faculty interaction in their annual reports to their local governing boards and the State Chancellor's Office.

Background:

In hybrid or fully online courses, ensuring **Regular Effective Instructor/Student Contact** guarantees that the student receives the benefit of the instructor's presence in the learning environment both as a provider of instructional information and as a facilitator of student learning. In a face to face course the instructor is present at each class meeting and interacts via all class announcements, lectures, activities and discussions that take a variety of forms. For example, discussions can be held as part of a lecture format, group work scenarios, or content review sessions. The instructor also serves as a content advisor when he or she answers questions both as they come up in class and as they arise in individual situations. These types of questions are dealt with via the telephone, email, or face to face office visits.

Title 5 regulations do not make a distinction between regular and distance education courses beyond the need to have a separate curriculum approval process and the need to ensure regular effective contact. Therefore, it is assumed that those qualities of regular effective contact described above for the face to face environment, should also be applied to the distance education situation. The DE Guidelines require colleges to develop a policy

regarding regular effective contact that addresses “the type and frequency of interaction appropriate to each DE course/section or session”.

SMCCCD Policy:

All DE courses at SMCCCD, whether hybrid or fully online will include regular effective contact as described below:

- **Initiated interaction:** Instructors will regularly initiate interaction with students to determine that they are accessing and comprehending course material and that they are participating regularly in the activities in the course. Providing students with an open ended question forum, although appropriate, does not constitute the entirety of effective instructor initiated interaction.
- **Frequency:** DE Courses are considered the “virtual equivalent” to face to face courses. Therefore, the frequency of the contact will be at least the same as would be established in a regular, face to face course. At **the very least**, the number of instructor contact hours per week that would be available for face to face students, will also be available, in asynchronous and/or synchronous mode, with students in the DE format. Contact shall be distributed in a manner that will ensure that regular contact is maintained, given the nature of asynchronous instructional methodologies, over the course of a week and should occur as often as is appropriate for the course.
- **Establishing expectations and managing unexpected instructor absence:** An instructor and/or department established policy describing the frequency and timeliness of instructor initiated contact and instructor feedback, will be posted in the syllabus and/or other course documents

that are made available for students when the course officially opens each semester. If the instructor must be out of contact briefly for an unexpected reason (such as illness or a family emergency that takes the instructor offline), notification to students will be made in the announcements area of the course that includes when the students can expect regular effective contact to resume. If the offline time results in a lengthy absence (i.e. more than three or four days) a substitute instructor should be sought who can assist students while the instructor is unavailable.

Type of Contact: Regarding the type of contact that will exist in all SMCCCD DE courses, instructors will, at a minimum, use the following resources to initiate contact with students:

- Threaded discussion forums with appropriate instructor participation.
- General email
- Weekly announcements in the Course Management System
- Timely feedback for student work.
- Instructor prepared e-lectures or introductions in the form of e-lectures to any publisher created materials (written, recorded, broadcast, etc.) that, combined with other course materials, creates the “virtual equivalent” of the face to face class.

Suggestions:

- Instructors should also choose to use other forms of communication, as mentioned in section 55211 of Title 5. (*“...through group or individual meetings, orientation and review sessions, supplemental seminar or study sessions, field trips, library workshops, telephone contact,*

correspondence, voice mail, e-mail, or other activities.”) and/or CCCConfer, video conference, pod cast, or other synchronous technologies may also be included.

- It is suggested that Instructors should have a threaded discussion that is set aside for general questions about the course and may wish to have weekly or other timely, question and answer sessions available to students. This may also be accomplished through virtual office hours.

Peer Evaluation Guidelines for Online instruction

Depth and Breadth of Subject Matter Knowledge

- ❖ Do the instructor-created elements of the course demonstrate appropriate depth and breadth of subject matter knowledge?
- ❖ Does the instructor provide the students with the necessary information to accomplish the course objectives both in the presentation and in the communication areas of the course?

Educational Methods and Techniques (delivering content online and evaluation methods online)

- ❖ Does the instructor encourage student based learning?
- ❖ Does the teacher encourage student/student and teacher/student interaction and collaboration (such as, Student “lounge” type discussion forum, or a “General Questions for the Instructor area.)
- ❖ Regarding the course content, are there ample discussion opportunities and are the discussion questions constructed so that meaningful dialog takes place? Do they allow for a wide range of individual experiences, opinions and ideas to be expressed?

- ❖ Does the instructor utilize a variety of instructional methods and resources to address multiple learning styles?

Course Design and Structure:

- ❖ Is the syllabus complete with course objectives, learning guidelines, and methods of evaluation?
- ❖ Is the course well organized and easy to navigate?
- ❖ Is the information regarding how to access the course content available at the beginning, as well as throughout the course?
- ❖ Are there well-defined instructor expectations regarding student conduct and participation in the course that encourage mutual respect and college level behavior?

Effectiveness of Communication: (discussion, announcements, etc.)

- ❖ Is the instructor available for student contact via discussions and email?
- ❖ Are the announcements tailored to the progress of the class and are they indicative of the timely presence of the instructor?
- ❖ In the online course environment, does the written communication style of the instructor demonstrate a positive tone and attitude?

Overall effectiveness of instruction:

- ❖ Summarize your observation in terms of the overall success of the course.

American Distance Education Consortium Guiding Principles for Distance Teaching and Learning

http://www.adec.edu/admin/papers/distance-teaching_principles.html

Basic Assumptions

- The principles that lend themselves to quality face-to-face learning environments are often similar to those found in web-based learning environments.
- With all forms of media converging to a digital platform, advanced educational technology may include a variety of learning environments and information appliances.
- While rapidly emerging technologies offer unlimited potential for virtual learning environments for both face-to-face as well as distance learners, practical application of existing technologies may often prove highly effective for various audiences and objectives.

The following principles are intended to serve as guidelines for identifying and evaluating web-based courses and non-formal educational programs. Web-based learning environments may be designed for distance as well as face-to-face students.

Principles

- **The learning experience must have a clear purpose with tightly focused outcomes and objectives.** Web-based learning designs must consider the nature of content, specific context, desired learning outcomes and characteristics of the learner. Learner-centered strategies

include modular, stand-alone units that are compatible with short bursts of learning. Learning modules may also be open, flexible and self-directing.

- **The learner is actively engaged.** Active, hands-on, concrete experiences are highly effective. Learning by doing, analogy and assimilation are increasingly important pedagogical forms. Where possible, learning outcomes should relate to real-life experiences through simulation and application.
- **The learning environment makes appropriate use of a variety of media.** Various learning styles are best engaged by using a variety of media to achieve learning outcomes. Selection of media may also depend on nature of content, learning goals, access to technology, and the local learning environment.
- **Learning environments must include problem-based as well as knowledge-based learning.** Problem-based learning involves higher order thinking skills such as analysis, synthesis, and evaluation while knowledge-based learning involves recall, comprehension and application.
- **Learning experiences should support interaction and the development of communities of interest.** Learning is social and sensitive to context. Learning experiences based on interaction and collaboration support learning communities while building a support network to enhance learning outcomes. Multiple interactions, group collaboration and cooperative learning may provide increased levels of interaction and simulation.
- **The practice of distance learning contributes to the larger social mission of education and training in a democratic society.** Changing mental models and constructing new knowledge empowers learners and encourages critical thinking. "Knowledge becomes a function of how the individual creates meaning from his or her experiences; it is not a function of what someone else says is true." (Jonassen, 1995)

Characteristics of quality web-based teaching and learning:

1. Fosters meaning-making, discourse
2. Moves from knowledge transmission to learner-controlled systems
3. Provides for reciprocal teaching
4. Is learner-centered
5. Encourages active participation, knowledge construction
6. Based on higher level thinking skills -- analysis, synthesis, and evaluation
7. Promotes active learning
8. Allows group collaboration and cooperative learning
9. Provides multiple levels of interaction
10. Focuses on real-world, problem solving

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