Suffolk

Instructional Design Manual

July 28, 2004

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Instructional Design

Instructional Design is the art and science of creating an instructional environment and materials that will bring the learner from the state of not being able to accomplish certain tasks to the state of being able to accomplish those tasks.

Instructional Design basically takes the ADDIE approach, which is Analysis, Design, development, Implementation and Evaluation.

Instructional Design is the broad term that includes all design of instruction, regardless of the theory they may be based on, taking into account the necessary elements for a successful learner experience.

Instructional Design is the systematic development of instructional specifications using learning and instructional theory to ensure the quality of instruction. It is the entire process of analysis of learning needs and goals and the development of a delivery system to meet those needs. It includes development of instructional materials and activities; and tryout and evaluation of all instruction and learner activities.

Instructional Development is the process of implementing the design plans.

Instructional Technology is the systemic and systematic application of strategies and techniques derived from behavioral, cognitive, and constructivist theories to the solution of instructional problems.

Instructional Technology = Instructional Design + Instructional Development

The Instructional Development Process

Design
-Determine need
-Analyze audience
-Establish goals

Revision
-Develop and implement revision plan

Development
-Create content outline
-Review existing materials
-Organize and develop content
-Select/develop material and delivery
 methods

Evaluation
-Review goals and objectives
-Develop evaluation strategy
-Collect and analyze data

- **The Design Stage**

- **Determine the need for instruction –** to begin, determine the need for
  instruction by considering what external data verify the need, what factors led to
  the instructional need, and what past experiences indicate that the instruction
  being planned can effectively meet this need.

-   **Analyze your audience** –To better understand the distant learners and their needs, consider their ages, cultural backgrounds, past experiences, interest and educational levels. Assess their familiarity with the various instructional methods and delivery systems being considered; determine how they will apply the knowledge gained in the course, and note whether the class will consists of a broad mix of students or discrete subgroups with different characteristics. When possible, the instructor should visit distant sites and interview prospective students. This personalized attention will also show students that the instructor is more than an anonymous presence, linked by electronics technology.

-   **Establish instructional goals/objectives** – Based on the nature of the problem as well as students needs and characteristics, establish instructional goals and objectives. Goals are broad statements of instructional intent, while objectives are specific steps leading to goal attainment.

The Development Stage

-Create a content outline – Based on the instructional problems, the audience analysis, instructional goals and objectives, and an understanding of the desired course content, create an outline of the content to be covered.

-**Review existing materials** – The instructor should review existing materials. Instructional materials should not be used solely because they are readily available or have been effective in a traditional classroom setting. This is especially true if pre-packed materials, such as telecourses, are being considered. Many pre-packaged instructional tools are developed and marketed to reach students with similar backgrounds and experiences; they may have little relevance for distant learners who come to the course with widely varied and non-traditional experiential backgrounds. If pre-packaged materials are to be used, consider developing "wrap around"

introductions, conclusions, and summaries that specifically relate the learning materials to the instructional context of the distant student.

-**Organize and develop content –** Perhaps the greatest challenge facing the distance educator is creating student-relevant examples. Content, for the most part, is taught using examples that relate the content to a context understood by the students. The best examples are "transparent", allowing the learners to focus on the content being presented. If examples are irrelevant, learning is impeded. This is a special challenge in rural and multicultural settings where the teacher's realm of experience and related content examples m y be foreign to distant learners. To address this problem, discuss potential content examples with a sampling of the target audience.

-**Select/develop materials and methods** – The development of instructional materials and selection of delivery methods will often require integrating print, voice, video and data technology in concert with fact-to-face communication. The challenge here is to integrate delivery components, based on identifiable learner needs, content requirements, and technical constraints. For example, it does little good to rely on delivery technology that is unavailable to some class members. Make sure the same delivery systems are available to all distant learners to avoid the need to create parallel learning experiences.

The Evaluation Stage

-**Review goals and objectives –** One purpose of evaluation is to determine if the instructional methods and materials are accomplishing the established goals and objectives. Implementation of instruction represents the first real test of what has been developed. Try to pre-test instruction on a small scale prior to implementation. If this is not possible, the first actual use will also serve as the "field test" for determining effectiveness.

-Develop an evaluation strategy – Plan how and when to evaluate the effectiveness of the instruction.

Formative evaluation can be used to revise instruction as the course is being developed and implemented. For example, the distance educator can give students pre-addressed and stamped postcards to complete and mail after each session. These "mini-evaluations" might focus on course strengths and weaknesses, technical or delivery concerns, and content areas in need of further coverage.

Summative evaluation is conducted after instruction is completed and provides a data base for course revision and future planning. Following course completion, consider a summative evaluation session in which students informally brainstorm ways to improve the course. Consider having a local facilitator run the evaluation session to encourage a more open discussion.

Eight Events of Instruction

Instructional Event	Internal Mental Process
1. Gain attention	Stimuli activates receptors
2. Inform learners of objectives	Creates level of expectation for learning
3. Stimulate recall of prior learning	Retrieval and activation of short-term memory
4. Present the content	Selective perception of content
5. Provide "learning guidance"	Semantic encoding for storage long-term memory
6. Elicit performance (practice)	Responds to questions to enhance encoding and verification
7. Provide feedback	Reinforcement and assessment of correct performance
8. Assess performance	Retrieval and reinforcement of content as final evaluation

1. **Gain attention**

   In order for any learning to take place, you must first capture the attention of the student. A multimedia program that begins with an animated title screen sequence accompanied by sound effects or music startles the senses with auditory or visual stimuli. An even better way to capture students'

attention is to start each lesson with a thought-provoking question or interesting fact. Curiosity motivates students to learn.

2. **Inform learners of objectives**

Early in each lesson students should encounter a list of learning objectives. This initiates the internal process of expectancy and helps motivate the learner to complete the lesson. These objectives should form the basis for assessment and possible certification as well. Typically, learning objectives are presented in the form of "Upon completing this lesson you will be able to. . . .

3. **Stimulate recall of prior learning**

Associating new information with prior knowledge can facilitate the learning process. It is easier for learners to encode and store information in long-term memory when there are links to personal experience and knowledge. A simple way to stimulate recall is to ask questions about previous experiences, an understanding of previous concepts, or a body of content.

4. **Present the content**

This event of instruction is where the new content is actually presented to the learner. Content should be chunked and organized meaningfully, and typically is explained and then demonstrated. To appeal to different learning modalities, a variety of media should be used if possible, including text, graphics, audio narration, and video.

5. **Provide "learning guidance"**

To help learners encode information for long-term storage, additional guidance should be provided along with the presentation of new content. Guidance strategies include the use of examples, non-examples, case studies, graphical representations, mnemonics, and analogies.

6. **Elicit performance (practice)**

In this event of instruction, the learner is required to practice the new skill or behavior. Eliciting performance provides an opportunity for learners to confirm their correct understanding, and the repetition further increases the likelihood of retention.

7. **Provide feedback**

As learners practice new behavior it is important to provide specific and immediate feedback of their performance. Unlike questions in a post-test, exercises within tutorials should be used for comprehension and encoding purposes, not for formal scoring. Additional guidance and answers provided at this stage are called formative feedback.

8. **Assess performance**

   Upon completing instructional modules, students should be given the opportunity to take (or be required to take) a post-test or final assessment. This assessment should be completed without the ability to receive additional coaching, feedback, or hints. Mastery of material, or certification, is typically granted after achieving a certain score or percent correct. A commonly accepted level of mastery is 80% to 90% correct.

What is Distance Education

Within a context of rapid technological change and shifting market conditions, the American education system is challenged with providing increased educational opportunities without increased budgets. Suffolk Community College is answering this challenge by developing the distance education programs. At its most basic level, distance education takes place when a teacher and students are separated by physical distance, and technology (i.e., voice, video, data, and print), often in concert with face-to-face communication, is used to bridge the instructional gap. This program has provided adults with a second chance at a college education, reach those disadvantaged by limited time, distance or physical disability, and update the knowledge base of workers at their places of employment.

Many educators ask if distant students learn as much as students receiving traditional face-to-face instruction. Research comparing distance education to traditional face-to-face instruction indicates that teaching and studying at a distance can be as effective as traditional instruction, when the method and technologies used are appropriate to the instructional tasks, there is student-to-student interaction, and when there is timely teacher-to- student feedback (see Moore & Thompson, 1990; Verduin & Clark, 1991).

How is Distance Education Delivered?

Suffolk County Community College offers learning at a distance in four modalities:

Online Courses an instructor-designed course that is accessible over the Internet (asynchronous). SCCC uses the SUNY Learning Network (SLN) as the Course Management System (CMS).

1. Faculty submit a proposal to teach an on-line and course and obtain approval from their Department Chair as well as the Distance Education Committee

2. The course is developed the semester before you are schedule to teach

3. SLN provides three workshops to assist you in developing your course.

The SUNY Learning Network's course template was created in Lotus Notes. The template is composed of four main areas:

(1) Course information

(2) Learning modules

(3) Class community,

(4) Course map

 Documents contained in the **course information area** are:

Welcome: Introducing yourself to your students. Think of it as a letter of introduction. It sets the tone for the course.

Registration vs. Access: Explains the difference between being officially registered for an SLN course and having access to the course through the SLN system to your students.

Contact Information: Details specific information about the course, how to contact you, and your schedule.

Overview: Describes the course in greater detail

Course Objectives: Describes the objectives in greater detail

Readings: Details the text and any materials used in the course. Also list any optional reading materials or resources for the course

Course Learning Activities: Specifically describe each type of activity that the students will be doing during the course.

How You Will Be Evaluated: Details specifically how each activity will be evaluated.

My Expectations: Details specifically what you expect from students in terms of participation in the class and any other specific expectations you may have for students in your class.

Course Schedule: Clearly outlines every activity the students needs to do in your course including readings assignments, assignment due dates, scheduled tests and quizzes, special projects, discussions, group activities. Titles and references to documents and module in your course must be referenced consistently for the schedule to be effective.

Your Next Steps: This document is already written for you. It points the students to the Bulletin Board area of the course, directs the students to post a personal profile in the Meet Your Classmates area of the course, and then directs them to your first course module.

The **learning modules area** contains a list of modules for the course. A module usually includes documents that provide students with an overview of the module, lecture notes, as well as places to submit their assignments, to join threaded discussions, and to take tests.

The **class community area** displays the following documents:

Meet Your Classmates: The students introduce themselves to their classmates and share some of their personal information.

Bulletin Board-Announcement: Where the student and the instructor post announcements.

Shared References: Where the students and in the instructor share references (i.e. websites)

Your Evaluations: Evaluations students receive from the instructor

Online Office Hours: Instructor online hours.

Your Private Folder: Every student and the instructor has a private folder. Information could only be seen by the instructor and the individual student.

It is important to finish the development of your online course two to three weeks prior to the beginning of the semester. This will not only give your campus Multimedia Instructional Designer (MID) an opportunity to review your course but also convey a sense of readiness to students when they are allowed to preview the course during the one-week "shop-around" period. Having instructional materials completed as soon as possible is also important if you are using the materials to supplement regular face-to-face teaching.

Hybrid (Blended) Course – requires 50 percent of the semester to be on campus meeting with your instructors in a classroom environment (synchronous), and 50 percent of your learning to be on the Internet using the SLN system as the course management system. Hybrid courses offer an ideal entry into the world of distance education. The student has both the benefit of meeting with the instructor and the convenience of working independently online.

Key Players in SCCC Distance Education Program

The following briefly describes the roles of key players in the distance education program and the challenges they face.

Students - Meeting the instructional needs of students is the cornerstone of every effective distance education program, and the test by which all efforts in the field are judged. Regardless of the educational context, the primary role of the student is to learn.

This is a daunting task under the best of circumstances, requiring motivation, planning, and an ability to analyze and apply the instructional content being taught. When instruction is delivered at a distance, additional challenges result because students are often separated from others sharing their backgrounds and interests, have few if any opportunities to interact with teachers outside of class, and must rely on technical linkages to bridge the gap separating class participants.

Faculty - The success of any distance education effort rests squarely on the shoulders of the faculty. In a traditional classroom setting, the instructor's responsibility includes assembling course content and developing an understanding of student needs. Special challenges confront those teaching at a distance. For example, the instructor must:

- Develop an understanding of the characteristics and needs of distant students with little first-hand experience and limited, if any, face-to-face contact.

- Adapt teaching styles taking into consideration the needs and expectations of multiple, often diverse, audiences.

- Develop a working understanding of delivery technology, while remaining focused on their teaching role.

- Function effectively as a skilled facilitator as well as content provider.

Facilitators (Distance Education Classroom)- The instructor often finds it beneficial to rely on a site facilitator to act as a bridge between the students and the instructor. To be effective, a facilitator must understand the students being served and the instructor's expectations. Most importantly, the facilitator must be willing to follow the directive established by the teacher. At a minimum, they set up equipment, collect assignments, proctor tests, and act as the instructor's on-site eyes and ears.

Support Staff - These individuals are the silent heroes of the distance education program and ensure that the myriad details required for program success are dealt with effectively. Most successful distance education programs consolidate support service functions to include: assisting faculty to technical support, student registration, materials duplication and distribution, textbook ordering, facilities scheduling, managing technical resources, etc.. Support personnel are truly the glue that keeps the distance education effort together and on track.

Administrators – SCCC administrators are very influential in planning an institution's distance education program. SCCC distance education administrators' work closely with technical and support service personnel, ensuring that technological resources are effectively deployed to further the institution's academic mission. Most importantly, they maintain an academic focus, realizing that meeting the instructional needs of distant students is their ultimate responsibility.

Distance Education Committee - The College Distance Learning Committee advises the Vice President for Academic and Campus Affairs on the development and implementation of distance education at the College. The Committee considers and make

recommendations on academic policy matters, program development, academic and technical support services, and professional development for the four distance education modalities; telecourses, distance education classroom (synchronous), web-based courses (asynchronous), and blended/hybrid courses.
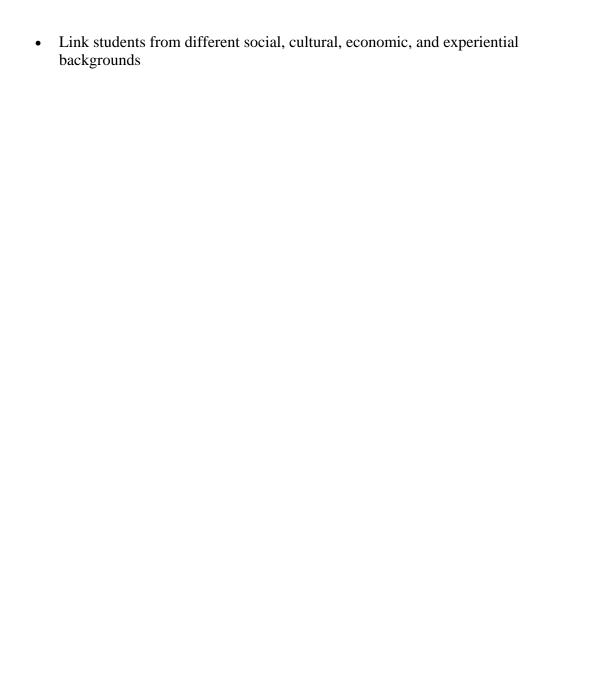
The Committee is charged with the following task:

1. work with the Deans of Faculty and the Associate Deans of the Schools to promote the development of distance education courses and to assure that their content and design are appropriate to the medium,

2. develop and recommend policies and procedures that provide technical and academic support to ensure distance learner success,

3. develop and recommend policies and procedures that provide technical and professional support for faculty who elect to teach distance education courses,

4. develop and recommend standards of proficiency that will be required of whomever wishes to teach a distance learning course,

5. develop outcomes assessment measures that describe and evaluate the success of the distance education program and provide the data on which future recommendations can be made,

6. periodically review facilities and equipment needs and make appropriate recommendations

Why Teach at a Distance?

Many teachers feel the opportunities offered by distance education outweigh the obstacles. In fact, instructors often comment that the focused preparation required by distance teaching improves their overall teaching and empathy for their students. The challenges posed by distance education are countered by opportunities to:

- Reach a wider student audience

- Meet the needs of students who are unable to attend on-campus classes

- Shy students have an opportunity to express ideas in class

- Link students from different social, cultural, economic, and experiential backgrounds

What's Different About Distant Teaching?

Classroom teachers rely on a number of visual and unobtrusive cues from their students to enhance their delivery of instructional content. A quick glance, for example, reveals who is attentively taking notes, pondering a difficult concept, or preparing to make a comment. The student who is frustrated, confused, tired, or bored is equally evident. The attentive teacher consciously and subconsciously receives and analyzes these visual cues and adjusts the course delivery to meet the needs of the class during a particular lesson.

In contrast, the distant teacher has few, if any, visual cues. Those cues that do exist are filtered through technological devices such as video monitors. It is difficult to carry on a stimulating teacher-class discussion when spontaneity is altered by technical requirements and distance.

Meeting Student Needs

To function effectively, students must quickly become comfortable with the nature of teaching and learning at a distance. Efforts should be made to adapt the delivery system to best motivate and meet the needs of the students, in terms of both content and preferred learning styles. Consider the following strategies for meeting students' needs:

- Assist students in becoming both familiar and comfortable with the delivery technology and prepare them to resolve the technical problems that will arise. Focus on joint problem solving, not placing blame for the occasional technical difficulty.

- Make students aware of and comfortable with new patterns of communication to be used in the course.

- Learn about students' backgrounds and experiences. Discussing the instructor's background and interests is equally important in your Welcome message.

- Be sensitive to different communication styles and varied cultural backgrounds. Remember, for example, that students may have different language skills, and that humor is culturally specific and won't be perceived the same way by all.

- Remember that students must take an active role in the distance delivered course by independently taking responsibility for their learning.

- Be aware of students' needs in meeting standard college deadlines, despite the lag time

Use Effective Teaching Skills

For the most part, effective distance teaching requires the enhancement of existing skills, rather than developing new abilities. Pay special attention to the following:

- Realistically assess the amount of content that can be effectively delivered in the course. Because of the logistics involved, presenting content at a distance is usually more time consuming than presenting the same content in a traditional classroom.

- Be aware that student participants will have different learning styles. Some will learn easily in group settings, while others will excel when working independently.

- Diversify and pace course activities and avoid long lectures. Intersperse content presentations with discussions and student-centered exercises.

- Humanize the course by focusing on the students, not the delivery system.

- Consider using a print component to supplement non-print materials

- Use locally relevant case studies and examples as often as possible to assist students in understanding and applying course content. Typically, the earlier in the course this is done, the better.

- Be concise. Use short, cohesive statements and ask direct questions, realizing that technical linkages might increase the time it takes for students to respond.

- Develop strategies for student reinforcement, review, repetition, and remediation. Towards this end, one-on-one phone discussions and electronic mail communication can be especially effective.

- And finally...relax. Participants will quickly grow comfortable with the process of distance education and the natural rhythm of effective teaching will return.

Improving Interaction and Feedback

Using effective interaction and feedback strategies will enable the instructor to identify and meet individual student needs while providing a forum for suggesting course improvements. To improve interaction and feedback, consider the following:

- Use pre-class study questions and advance organizers to encourage critical thinking and informed participation on the part of all learners. Realize that it will take time to improve poor communication patterns.

- Early in the course, require students to contact you and interact among themselves via electronic mail, so they become comfortable with the process. Maintaining and sharing electronic journal entries can be very effective toward this end.

- Contact each site (or student) every week if possible, especially early in the course. Take note of students who don't participate during the first session, and contact them individually after class.

- Use an on-site facilitator to stimulate interaction when distant students are hesitant to ask questions or participate. In addition, the facilitator can act as your on-site "eyes and ears".

- Call on individual students to ensure that all participants have ample opportunity to interact. At the same time, politely but firmly discourage individual students or sites from monopolizing class time.

- Make detailed comments on written assignments, referring to additional sources for supplementary information. Return assignments without delay, using fax or electronic mail, if practical.

Evaluate

Effective teachers use a variety of means, some formal and others informal, to determine how much and how well their students are learning. For example, to formally evaluate student learning, most teachers use quizzes, tests, examinations, term papers, lab reports, and homework. These formal evaluation techniques help the instructor to evaluate student achievement and assign grades.

To evaluate classroom learning informally, teachers also use a variety of techniques. For example, teachers pose questions, listen carefully to student questions and comments, and monitor body language and facial expressions. Informal, often implicit evaluations permit the teacher to make adjustments in their teaching: to slow down or review material in response to questions, confusion, and misunderstandings; or to move on when student performance exceeds expectations.

When teaching at a distance, educators must address a different teaching challenge than when teaching in a traditional classroom. For example, instructors no longer have:

- A traditional, familiar classroom.

- A relatively homogeneous group of students.

- Face-to-face feedback during class (e.g. students' questions, comments, body language, and facial expressions).

- Total control over the distance delivery system.

- Convenient opportunities to talk to students individually.

For these reasons, distance educators will find it useful to not only formally evaluate students through testing and homework, but to use a more informal approach in collecting data to determine:

- Student comfort with the method used to deliver the distant instruction.

- Appropriateness of assignments.

- Clarity of course content.

- If class time is well spent.

- Teaching effectiveness.

- How a course can be improved.

Types of Evaluation

Evaluation can be either formative, summative, or a combination of both.

Formative evaluation:

- Is an on-going process to be considered at all stages of instruction.

- Will enable the instructor to improve the course as he/she proceeds.

- Facilitates course and content adaptation.

- Will identify major gaps in the instructional plan or the need for minor adjustments.

Some strategies that educators can use to collect formative data from their distant students include:

- Electronic mail - Can be a very effective way for instructors and students to communicate. Another plus, while the instructor is eliciting information about classroom learning, students become familiar with the use of electronic mail, a valuable skill.

- Telephone - Call students often. Ask them open ended questions (e.g., "What snags did you run into on the second writing assignment?") to let students voice their concerns. Follow with probes (e.g., "Then, will you need more information sources?"). Set phone-in office hours but be sure to welcome calls at other times.

Summative evaluation:

- Assesses overall effectiveness of the finished product or course.

- Can be a springboard in developing a revision plan.

- Can be a baseline of information for designing a new plan, program, or course.

- Will not help current students since it is conducted upon course completion.

Some questions that educators may want to ask students when collecting summative data include:

- List five weaknesses of the course.

- List three (or five) strengths of the course.

- If you were teaching the course, what would you do differently?

- Student background information: age, level in school, number of distance delivered courses taken prior to this one.

- What would you recommend to a friend planning to take this course?

- What did you think would be covered in this course but was not?

- Would you recommend this course to a friend? Why or why not?

Evaluation Methods

Within the context of formative and summative evaluation, data may be collected through quantitative and qualitative methods.

Quantitative evaluation:

- Involves asking questions which can be statistically tabulated and analyzed, frequently using a scale, check list, or yes/no responses.

- Limits students to responding to the categories made available to them.

- Needs a large student sample for relevant statistical analyses.

Quantitative methods may be most useful for gathering information on large numbers of respondents for whom more in-depth, personalized approaches are not feasible. However, they do have some significant drawbacks:

- Many distance education courses have relatively small class sizes with students from various backgrounds. These small, stratified populations typically defy relevant statistical analysis.

- Quantitative surveys typically result in a rate of return of fewer than 50 percent. A low rate of return often suggests that only those feeling very positively or negatively about the course responded to the evaluation.

- By definition and design, forced choice surveys offer respondents a limited number of possible response options. Therefore, fresh insights and unique perspectives falling outside the provided response categories go unreported.

- The cumbersome and often tedious nature of quantitative data collection can discourage formative evaluation, and often results in an over-reliance on summative evaluation.

- Statistical analysis often results in an illusion of precision that may be far from reality.

Qualitative evaluation:

- Is typically more subjective.

- Involves gathering a wider range and depth of information.

- Is more difficult to tabulate into neat categories.

- Will be less affected by typical small class size.

- Is a more flexible and dynamic method.

- Is not limited to pre-conceived topic of inquiry.

- Allows for student output of topics.

Can use:

- Open ended questioning -- with respondents asked to identify course strengths and weaknesses, suggest changes, explore attitudes towards distance delivery methods, etc..

- Participant observation -- with the distance educator observing group dynamics and behavior while participating in the class as an observer, asking occasional questions, and seeking insights regarding the process of distance education.

- Non-participant observation -- with the distance educator observing a course (e.g., an audio conference, interactive television class, etc.) without actually participating or asking questions.

- Content analysis -- with the evaluator using predetermined criteria to review course documents including the syllabus and instructional materials as well as student assignments and course-related planning documents.

- Interviews -- with a facilitator or specially trained individual collecting evaluative data through one-on-one and small-group interviews with students.

What to Evaluate

Consider the following areas:

- Use of technology - familiarity, concerns, problems, positive aspects, attitude toward technology.

- Class formats - effectiveness of lecture, discussion, question and answer; quality of questions or problems raised in class; encouragement given students to express themselves.

- Class atmosphere - conduciveness to student learning.

- Quantity and quality of interaction with other students and with instructor.

- Course content - relevancy, adequate body of knowledge, organization.

- Assignments - usefulness, degree of difficulty and time required timeliness of feedback, readability level of print materials.

- Tests - frequency, relevancy, sufficient review, difficulty, feedback.

- Support services - facilitator, technology, library services, instructor availability.

- Student achievement - adequacy, appropriateness, timeliness, student involvement.

- Student attitude - attendance, assignments submitted, class participation.

- Instructor - contribution as discussion leader, effectiveness, organization, preparation, enthusiasm, openness to student views.

Evaluation Tips

- Check out and adapt already published questionnaires; there's no need to re-invent the wheel.

- Draft and revise questions; change if necessary.

- Make use of follow-up probes:

- Alternate between instruction and interaction.

- Sequence your questions for best effect - go ahead and ask for suggestions for improvement before asking for what is good. This will help convey sincerity for seeking improvements.

- Place open ended questions after quick answer questions. This gives students built-in thinking time.

- On summative evaluation, assure anonymity. This can be accomplished by having all questionnaires sent to a neutral site where they would be removed from their envelopes and forwarded to the instructor without a postmark.

- Establish rapport by being interested and supportive. Withhold judgmental responses.

- Adapt to the student in degree of formality and pace of communication.<

- Use evaluation as a method for understanding teaching and learning.

- Try to get both positive and negative feedback. It is important not only to know what is not working, but also what is working.