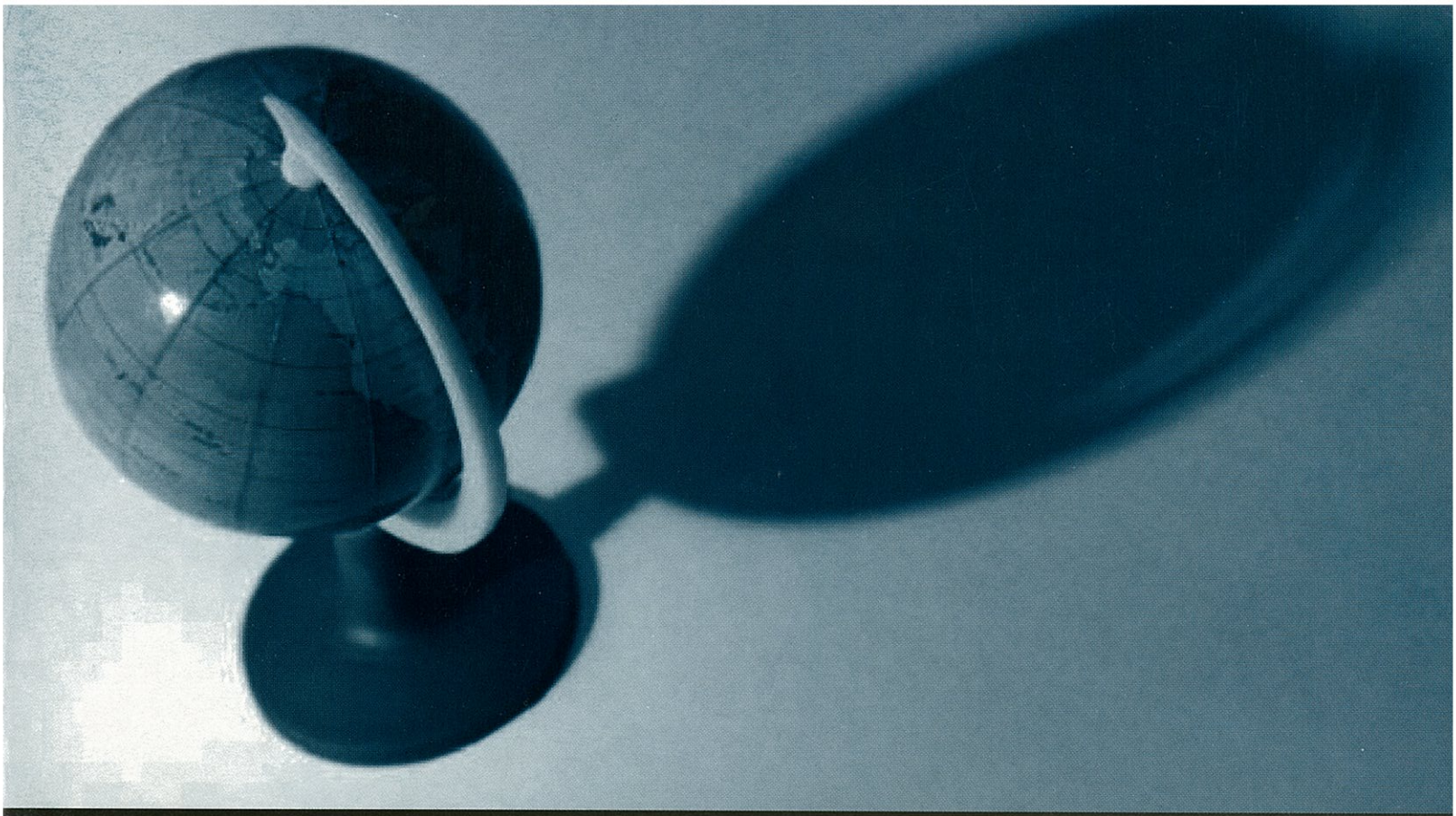


Competency-Based Continuing Education Programme for Teachers Utilizing Distance Education Technologies and Materials

# Introduction to Distance Education

module 13

MODULE

13

# Introduction to Distance Education

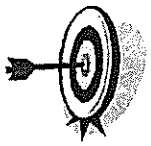
## What This Module is About

Within the context of rapid technological change, the Philippine education system is challenged with providing increased educational opportunities without increased budgets. Many educational institutions are answering this challenge by developing distance education programs. Distance education is instructional delivery that does not constrain the student to be physically present in the same location as the instructor. Historically, distance education meant correspondence study. Today, aside from printed materials, audio, video and computer technologies are also common delivery modes. Distance education is still a relatively new concept in the Philippines and in many parts of the world. But in recent years, it has drawn widespread and growing interest largely because of the emergence of sophisticated communications technology.

In this module, you will learn what distance education is as well as how technology serves distance education systems. You can use the information that you will get in this module in considering teaching and learning at a distance.

This module has three lessons:

- Lesson 1 — *What is Distance Education?*
- Lesson 2 — *How Does Distance Education Work?*
- Lesson 3 — *The Challenge of Making Distance Education Work*



## What Are the Objectives of This Module?

After studying this module, you should be able to:

- define what distance education is;
- explain the relationship between distance education and open learning;
- explain the different modes of delivery of distance education;
- explain the strengths, limitations and applications of the different distance education modes of delivery;
- identify the people involved in a distance education program; and
- explain the challenge facing those who want to study and teach at a distance.

## Test Your Knowledge

Answer the following questions as best as you can. Use a separate sheet of paper for your answers.

1. What is distance education?
2. What is open learning?
3. What is on-line learning?
4. How is distance education delivered?
5. What are the advantages and disadvantages of teaching and learning at a distance?

You may not have enough knowledge or information about the things that were asked. But do not worry because this is just a diagnostic test. You will find out if your answers or perceptions are correct as you go along in the module. Now, go to the next page to begin Lesson 1.

LESSON 1

# What is Distance Education?

Distance education is traditionally defined as an educational process in which a significant proportion of the teaching is conducted by someone removed in space and /or time from the learner. But distance education has changed considerably in the past few years. In this lesson, you will analyze the different definitions given to distance education. You will likewise learn some basic concepts related to distance education.

After studying this lesson, you should be able to:

- define what distance education is;
- explain how distance education has evolved through the years; and
- explain the difference between distance education and open learning.

**Reflect**

The COMPETE Learning Program is an example of distance education. What is your understanding of distance education? How is it different from face-to-face instruction?

**Activity 1.1**

Study the definitions of distance education below.

*"Distance education is a term used to cover various forms of study at all levels where students are not in direct physical contact with their teachers."*

*"Distance teaching may be defined as the family of instructional methods in which the teaching behaviors are executed apart from the learning behaviors, including those that in a contiguous situation would be performed in the learner's presence, so that communication between the teacher and learner must be facilitated by print, electronic, mechanical or other devices."*

What can you say about these definitions?

Did you notice that the first definition focused on the "distance" component while the second definition focused on the "methods" component of distance education?

You see, distance education has several components or elements and Desmond Keegan's definition was able to capture all of these components. Read on to find out Keegan's definition of distance education.

Study

## Keegan's definition of distance education

Keegan (1986) proposed five criteria in defining distance education:

1. The quasi-permanent separation of teacher and learner throughout the length of the learning process. This distinguishes distance education from conventional face-to-face instruction.
2. The influence of an organization both in planning and preparation of learning materials and in the provision of student support and services. This distinguishes distance education from private study and teach-yourself programs.
3. The use of technical media, print, audio, video, or computer to unite teacher and learner and carry the content of the course.
4. The provision of two-way communication so that the student may benefit from or even initiate dialogue. This distinguishes it from other uses of technology in education.
5. The quasi-permanent separation of the learning group throughout the length of the learning process so that people are usually taught as individuals and not in groups, with the possibility for occasional meetings for both didactic and socialization purposes.

What components of distance education did Keegan include in his definition?

Write them down below.

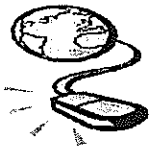
Based on Keegan's definition, we can say in a distance education system, there is:

- Distance of student and instructor – quasi-permanent
- Organization – responsible for planning and preparation of materials
- Use of media – as a delivery mode
- Communication – two-way
- Distance of students among themselves – quasi-permanent

Now, you have read and analyzed several definitions of distance education. Come up with your own definition of distance education. Write down your definition below.

Let's recap what we have discussed so far. Distance education today, can be seen as "education or instruction in which majority of the teaching occurs while educator and learner are at a distance from one another. Distance education is carried out by an organization that develops educational media such as printed materials, instructional video tapes or audio tapes to unite teacher and learner and provides appropriate evaluation of the learning."

**Browse the Web**



If you want to find out more about Desmond Keegan and his works, check out this site: http://homepage.tinet.ie/~dei/ICDERA/Board/D__Keegan/d__keegan.htm

**Reflect**

Technology is a big part of most distance education systems today. You may be surprised to know however that distance education is over a 100 years old. Imagine what distance education was like in past when sophisticated technology was not yet available. What do you think was the delivery mode of distance educations programs in the past?

Let's find out.

**Study**

## Distance Education, Then and Now

In the USA in the 18th century, a Boston gazette carried a change of address notice from a teacher of shorthand which said,

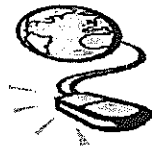
*"Any person who wishes to study shorthand may have several lessons sent him weekly and he would be as perfectly instructed as the person who lives in Boston".*

This was an offer to students who wanted to study shorthand through correspondence. It is rightly claimed that this must be the first recorded offer of a correspondence course.

Printed and written correspondence by mail was the only mode of delivery utilized in most early distance education systems. Because of this, the practice was known as *correspondence study*. As time went by, educators used other methods of instructional delivery. The telephone, along with other media such as radio and television came to play a significant role in distance education programs. Because the term correspondence study was associated with the printed word and did not describe distance education utilizing nonpostal modes of delivery, educators using print, radio and television and other media at a distance did not see themselves as working in the same field as educators using written material.

Today, distance education takes place when a teacher and student(s) 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. These types of programs can provide those that are disadvantaged by limited time and distance or physical disability whether they are students, employed or unemployed, young or old an opportunity to get an education or improve their skills.

**Browse the Web**



If you want to find out more about the history of distance education, check out this site: http://www.bsu.edu/classes/nasseh/study/history.html

**Activity 1.2**

Make a summary on what you have just read. Then, browse the web for recent developments in the area of distance education.

Now let us look at distance education in relation to face-to-face education.

**Activity 1.3**

Compare distance education with face-to-face education. What are their similarities and differences? Write your answers on the table below.

| Similarities | Differences |
|---|---|
| | |

Are you finished? In your list, were there more differences or similarities between the two?

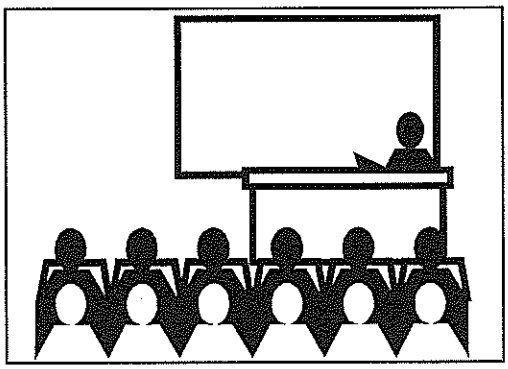
Read on to find out more about the relationship between distance education and face-to-face education.

**Study**

## Distance Education and Traditional Face-to-face Education

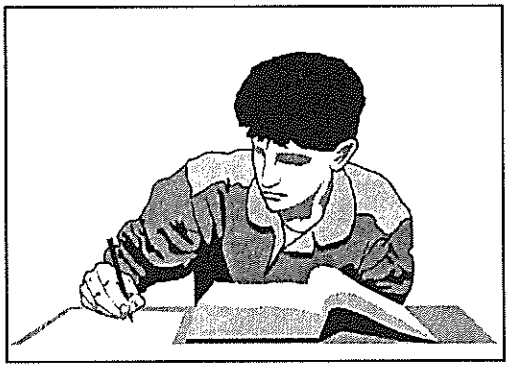
Distance education is usually contrasted with conventional or face-to-face education which may be described as the form of education that takes place in the classroom. However, both distance and face-to face education are labels covering a wide-range of methods.

Face-to-face education in its pure form may vary along a continuum going from one-to-one tutorials, group activities, seminars, classroom teaching to lectures for large audiences. In each case, different educational approaches and methods may be used.



Face-to-face education may also be supported by technical media, and it is usually combined with periods of independent study, with more or less direction from the teacher and dependence on specific learning materials.

In a similar way, distance education has a variety of forms, according to the choice of media and ways of organization.



The original and still most widespread form is correspondence education. Print is used as the dominant learning material, written letters as the usual medium of communication. Other forms are radio school, educational television, telephone teaching, teleconferences, electronic classrooms and computer-mediated communication. Very often, the media bridging the distance are combined with face to face interaction in working groups, seminars or lectures. Many media used in distance education are also used in support of face-to-face teaching.

This shows that although there is a clear distinction is theory between distance education and conventional or face-to-face education, the distinction in practice is far from clear. This is also underlined by the fact that an increasing number of educational institutions use both conventional and distance types of methods when designing education programmes - either as alternative forms or in a mix of two types within the same programmes.

**Reflect**

There's another concept that is often mentioned alongside distance education, "open learning." You may have encountered this word before. What do you think the term "open learning means"? How do you think it is different from distance education?

Study

# Distance Education and Open Learning

What's the difference between distance learning and open learning? Open learning can certainly be done at a distance. For example, thousands of Open University students work on their own for most of the time they study, rarely attending any sort of live session.

However, open learning can also happen in a crowded lecture room. Suppose the lecturer asks the class to spend a few minutes digging in some handout materials for the answers to some questions posed to the class; the class members work on their own for a while – that is open learning. Similarly, open learning can occur in laboratories, training centers, workshops – just about anywhere. It doesn't matter whether the learner is part of a group or on his/her own, open learning can still be happening.

## What does "open" in open learning mean?

It means that the learner has a *choice*. He or she has the freedom to maneuver. The learner has more control. There isn't as much control imposed by such people as lecturers, instructors or teachers as in conventional training and education.

## What kinds of choice and control do open learners have?

They have more control over the pace they are going to work at. They can take as long as is needed to complete a material. No more getting bored because the lecturer is too slow. No more losing track because the lecturer is going too fast. When in open learning mode, learners have control of the rate they are studying. There may still be deadlines to meet - target dates for written assignments, and even exam dates. However, the slow learner can keep pace simply by putting in more hours than the rapid learner and meet the same deadlines.

Open learners may choose *where* to learn. Open learning can be done at home, in the library or in the workplace or just about anywhere.

Open learners can choose *when* to do their learning. This can mean that they learn much more effectively that they may have done in 'imposed' time slots. In face to face courses, how many students look bleary-eyed in morning lectures? This may be because they come to life at night rather than in the morning! With open learning, night owls can choose to do their work at night.

Open learners can also choose *how* to learn This means that they can choose for example to plan out a programme of targets regarding the completion of the open learning programme. The learners can choose to revise systematically. They can deliberately go back to the harder bits-as many times as is needed to get them sorted out properly.

## What's an open learning package?

There are all sorts of things that can be called open learning packages. Some are entirely made up of printed material. The best print-based packages are quite different from the average textbook. Many open learning packages use audio tapes, video recordings, computer software and so on. So, basically, an open learning package can have many forms – the common factor is that learners can work through the package on their own.

It is important to note that the degree of openness in an open learning system may vary. Imagine an open and closed continuum such as the one below where 10 indicates absolute openness.

| Closed | | | | | | | | | Open |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

The level of openness can fall at any point in this continuum. For example, under the COMPETE Program, you can more or less use the computers in the computer lab the way you want to. You can browse the web, read an article specified in the module etc. However, you are required to come to the computer lab at a specific date and perhaps use the computers for a specified time only, say two hours. This means that the level of "openness" in terms of where, when and how you can use the computer is not absolute and perhaps fall under 6, 7 or 8 depending on your perception.

## Activity 1.4

Analyze the different aspects of the COMPETE Learning program (for example when, where and how you study). Then, identify where in the open- close continuum does a particular part fall. Explain your answer. Follow the example below.

The COMPETE Learning Program allows open learning. While you are given one week (or two weeks) to finish a module, in general, you can choose the time, place and speed at which you will study the module. Given this, the level of openness of the COMPETE Learning Program may be somewhere between 7 or 8.

## Summary

Do not forget the important points of this lesson.

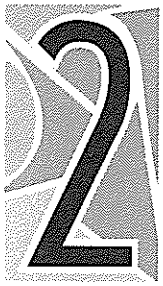
- Distance education is instruction in which majority of the teaching occurs while educator and learner are at a distance from one another. Distance education is carried out by an organization that develops educational media to unite teacher and learner and provides appropriate evaluation of the learning.
- Printed and written correspondence by mail was the only mode of delivery utilized in most early distance education systems. Today, sophisticated technology is used to provide instruction to those that are disadvantaged by time and distance or physical disability.
- Open learning can occur at a distance or in a classroom. Open learning suggests the learners has freedom to choose when, where and how he/she is going to learn.

## Apply What You Have Learned

1. Browse the web and find some definitions of distance education and open learning. Take note of the website where you got the definition. Analyze the definitions given. 1. Use the following questions to guide you in your analysis: Are they correct? 2. Are they sufficient? 3. Are the definitions on distance education focused only on some aspects of distance education?
2. Research on the history of distance learning in the Philippines. You can research on the internet, refer to books and periodicals or interview people to get information about the topic.

Are you finished? You can now proceed to the next lesson.

LESSON



# How Does Distance Education Work?

Many educators ask if students of distance education 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.

In this lesson, you will learn the modes in which distance education materials are delivered as well as the advantages and disadvantages of each mode. The lesson will likewise discuss the key people involved in distance education.

After this lesson, you should be able to:

- explain the role of the people involved in a distance education program;
- explain the different modes of delivery of distance education; and
- explain the strengths, limitations and applications of the different delivery modes of distance education.

**Activity 2.1**

Answer this.

If you were to come up with a distance education package, what delivery mode (the way by which you will deliver your learning materials) will you choose and why?

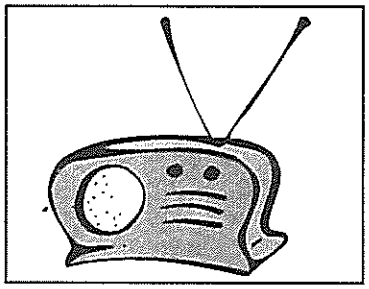
In the next discussions, you will learn that technology in distance education is not used for the sake of using technology. There is a reason for choosing one technology over another. Let's find out.

**Study**

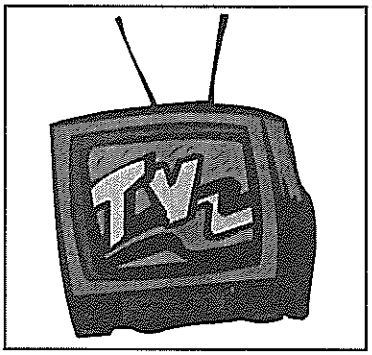
## How is Distance Education Delivered?

A wide range of technological options are available to the distance educator. They fall into four major categories:

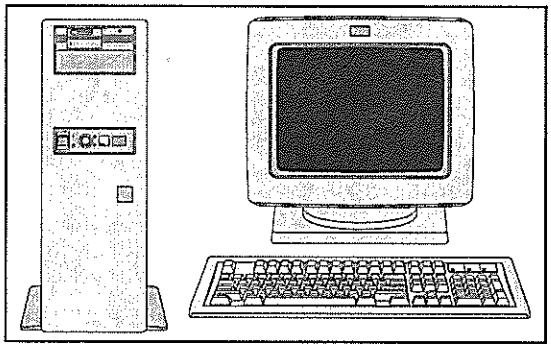
- Voice - Instructional audio tools include the interactive technologies of telephone, audioconferencing, and short-wave radio. Passive (i.e., one-way) audio tools include tapes and radio.



- Video - Instructional video tools include still images such as slides, pre-produced moving images (e.g., film, videotape), and real-time moving images combined with audioconferencing (one-way or two-way video with two-way audio).




- Data - Computers send and receive information electronically. For this reason, the term "data" is used to describe this broad category of instructional tools.



Computer applications for distance education are varied and include:

- Computer-assisted instruction (CAI) - uses the computer as a self-contained teaching machine to present individual lessons.
- Computer-managed instruction (CMI) - uses the computer to organize instruction and track student records and progress. The instruction itself need not be delivered via a computer, although CAI is often combined with CMI.
- Computer-mediated education (CME) - describes computer applications that facilitate the delivery of instruction. Examples include electronic mail, fax, real-time computer conferencing, and World-Wide Web applications.

- Print - is a foundational element of distance education programs and the basis from which all other delivery systems have evolved. Various print formats are available including: textbooks, study guides, workbooks, course syllabi, and case studies.

We will discuss these modes in greater detail later. It is important to remember that while there are many ways at which distance education is delivered, this is not the key to learning. In distance education, learners have a much greater responsibility of managing and directing their own learning. This is what is called self-directed learning. The various delivery modes are the driving force of the instruction and learning process as opposed to the teacher in a face-to-face learning environment. The instructor likewise becomes a learning support person rather than the main source of information. The other roles of the instructor like giving feedback, guidance and encouragement are woven into the learning materials.

**Activity 2.2**

Refer to Keegan's definition of distance education in Lesson 1. Based on Keegan's definition, who do you think are the key players in distance education and what are their respective roles? Write down your ideas on the table below.

| Players | Roles |
|---|---|
| | |
| | |
| | |
| | |
| | |

**Study**

## Who are the Key Players in Distance Education?

The following briefly describes the roles of these key players in the distance education enterprise 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.

If you want to be a student of distance education, consider or choose the mode in which you want to receive instruction. Ask yourself what your educational need or goal is. Look at the technology to be used and think about how it might fit your goals. If there are several courses, find out how the technology will fit into the course.

**Faculty/ Materials Developer** - The success of any distance education effort rests squarely on the shoulders of the faculty and/or materials developer. 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. A faculty 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;
- provide feedback and guidance to learners;
- 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; and
- function effectively as a skilled facilitator as well as content provider.

In some cases, the materials developer/s are different from the faculty. The materials developers are primarily in charge of preparing the teaching and learning materials to be used by the faculty and the learners. The materials developers includes instructional designers, editors, illustrators, multimedia specialists etc.

**Facilitators** – In most university-based distance education courses, there are facilitators. The instructor often 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. Where budget and logistics permit, the role of on-site facilitators has increased even in classes in which they have little, if any, content expertise. 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 enterprise 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 student registration, materials duplication and distribution, textbook ordering, securing of copyright clearances, facilities scheduling, processing grade reports, managing technical resources, etc.. Support personnel are truly the glue that keeps the distance education effort together and on track.

**Administrators** - Although administrators are typically influential in planning an institution's distance education program, they often lose contact or relinquish control to technical managers once the program is operational. Effective distance education administrators are more than idea people. They are consensus builders, decision makers, and referees. They 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.

**Reflect**

In the COMPETE Learning Program, who are the key players and what are their respective roles?

Now, let us discuss in detail the various delivery modes of distance education.

**Study**

## Print

Print is the foundation of distance education and the basis from which all other delivery systems have evolved. The first distance-delivered courses were offered by correspondence study, with print materials sent and returned to students by mail. While technological developments have added to the repertoire of tools available to the distance educator, print continues to be a significant component of all distance education programs. The COMPETE Learning Program utilizes print modules as a principal mode of delivering distance education.

## Formats of Print Materials

Various print formats are available, including:

- Textbooks. As in traditionally delivered courses, textbooks are the basis and primary source of content for the majority of distance-delivered courses. While textbooks should always be critically reviewed before adoption, this is especially critical when the learner and the instructor are not in daily contact.
- Study guides. Typically, distance educators use study guides to reinforce points made during class and through the use of other delivery systems. They will often include exercises, related readings and additional resources available to the student.
- Workbooks. In a distance education context workbooks are often used to provide course content in an interactive manner. A typical format might contain an overview, the content to be covered, one or more exercises or case studies to elaborate the points being made, and a quiz or test (with answer key) for self-assessment. In addition, there is typically some form of feedback, remediation, or "branching" loop to recycle students through the instruction as needed. The module that you are reading falls under this category.
- Course syllabus. A comprehensive and well-planned course syllabus is the foundation of many distance-delivered courses. It provides course goals and objectives, performance expectations, descriptions of assignments, related readings (often by session), grading criteria, and a day-by-

day overview of the material to be covered. The syllabus must be as complete as possible in order to guide the students through the course in the absence of daily contact with the instructor.

- Case studies. If written imaginatively, case studies are an extremely effective instructional tool. In fact, case studies are often designed around the limitations of print and intended to spark the students' imaginations as they place themselves in the particular case under consideration. Many case studies present a content-based scenario. They raise questions, pose alternative solutions, and then branch students to different sections of the text. There, the consequences of the selected alternative are described.

**Activity 2.3**

This module, as well as the other COMPETE modules are examples of print distance education materials. What do you think are the advantages of print distance education materials? What are its limitations?

Compare your list to the discussions below.

**Study**

## Advantages of print distance education materials

Print offers many advantages.

- **Spontaneous.** Print materials can be used in any setting without the need for sophisticated presentation equipment.
- **Instructionally transparent.** The medium of delivery should enhance, not compete with, the content for the learner's attention. If the student reads well, the print medium is the most transparent instructional medium of all.
- **Non-threatening.** Reading is second nature to most students. As a result, they are easily able to focus on the content, without becoming mesmerized or frustrated by the process of reading itself.
- **Easy to use.** Given adequate light, print materials can be used any time and any place without the aid of supplemental resources such as electricity, viewing screen, and specially designed electronic classrooms. The portability of print is especially important for rural learners with limited access to advanced technology.
- **Easily reviewed and referenced.** Print materials are typically learner-controlled. As a result, the student rapidly moves through redundant sections, while focusing on areas demanding additional attention.
- **Cost-effective.** No instructional tool is less expensive to produce than print. In addition, facilities abound for the inexpensive duplication of these materials.
- **Easily edited and revised.** In comparison to technically sophisticated electronic software, print is both easy and inexpensive to edit and revise.
- **Time-effective.** When instructional print materials are created, the developer's primary focus remains on content concerns, not the technical requirements of the delivery system.

However, print also has its limitations.

- **Limited view of reality.** Print, by its reliance on the written word, offers a vicarious view of reality. Despite the use of excellent sequential illustrations or photos, for example, it is impossible to adequately recreate motion in print.
- **Passive and self-directed.** Numerous studies have shown that higher learner motivation is required to successfully complete print-based courses. To a certain extent, the passive nature of print can be offset by systematic instructional design that seeks to stimulate the passive learner. Still, it takes more motivation to read a book or work through a written exercise than it does to watch a television program or participate in an audioconference with an instructor encouraging student participation and response.
- **Feedback and interaction.** Without feedback and interaction, instruction suffers, regardless of the delivery system in use. By nature, print materials are passive and self-directed. Even with print materials incorporating feedback mechanisms and interactive exercises, it is easy for learners to skip to the answer section.
- **Dependent on reading skills.** Thanks to television, most students have developed fairly good viewing skills by age four. These same children, however, often fail to develop adequate reading skills by age 12. Reading skills must often be improved. Lack of ability in this area cripples the effectiveness of even the most instructionally sound print material and must be overcome if print is to be used effectively.

**Reflect**

If you were to write a print distance education material, how will you go about it?

**Activity 2.4**

Study the structure and language used in writing the Project COMPETE learning materials. What do you think are the important considerations when writing print distance education materials?

Because print is largely a one-way communication medium, the challenge is to design instruction to maximize the amount of interaction in distance education print materials. You should remember that the printed material in distance education performs many roles and functions such as integration, feedback, guidance and motivation.

We, at SEAMEO-INNOTECH always bear in mind the following when producing print distance education materials.

- Writing style. Distance educators write instructional materials with language more like that used for speaking than for writing journal articles or books.
- The context for which the materials are being developed. For example, if the materials are being developed for out of school youths, the language and examples should be appropriate for their level.
- The content are broken down into manageable chunks and activities. Reflective questions, summaries and review are woven in the content.

- Focusing on content organization before developing content. Prior to content development, create an outline of the material to be covered. Print materials are often too wordy because the author is planning, organizing and writing at the same time. Instead, organize content based on the identified goals and objectives. At first, focus on systematically and creatively ordering the flow of topics, not polishing a finished product. The end result will be a well-organized content outline from which the written content will easily flow.
- Developing a course introduction. The course introduction can include biographical background information about the instructor, a course overview, course goals and aims, a listing of any textbooks or ancillary learning materials that will be needed, and information about assignments, examinations, and grading.
- Staying with a consistent format. Learner anxiety with the unknown can be reduced through consistency in instructional presentation. Develop an effective format and organizational scheme and stick with it. Use adequate headings and subheadings to visually guide the reader through the material.
- Using advance organizers. Advance organizers are a means to connect new material with a learner's prior knowledge and cognitive structure. They should be of a more general and abstract character than the learning matter that follows and help the learner to relate different parts and concepts of teaching material to each other. Place the most general and comprehensive ideas at the beginning of a lesson and progress to more structured and detailed information.
- Using examples and analogies. In a traditional classroom, teachers spontaneously provide examples and analogies to illustrate a point that students are having difficulty understanding. Because distant students and their teachers may not have this type of interaction, include lots of good examples and analogies in print-based materials. Be sure, however, that these examples address the various cultural groups, ages and experiences of the students.
- Including questions. Questions in print material can stimulate the learner to be more active and to deal more intensively with the learning matter. Use questions that aim at understanding rather than merely reproduction and memorization of facts.
- Providing clear instructions. Directions for activities or tests should be clear and concise so as not to confuse the learner.
- Providing an opportunity to determine the learners progress through self-assessment activities and feedback.

**Activity 2.5**

Review this COMPETE module or the modules you have finished. Which of the abovementioned characteristics were evident? Which ones need to be strengthened? Use a separate sheet of paper for your answer.

Let's move on to another mode of delivering distance education, television.

## Television/Video

Instructional applications of television/ video in distance education fall into four general categories.

1. Pre-produced video. The video component of a single instructional unit or a series of lessons comprising a telecourse consists of programs that have been designed and produced according to specific instructional objectives. Programs may be distributed by video cassette or by video–based technologies such as broadcast, cable or satellite.
2. Televised instruction. Televised instruction transmits a classroom lecture to off-campus locations. In this delivery system, only the technology of television transmission is used, not the presentational characteristics unique to the medium.
3. Interactive video. Interactive video integrates video with computer. Learners interact with the subject matter by computer-controlled instructions, activities and feedback.
4. Videoconferencing. A videoconference emulates a face-to-face meeting or conference and may consist of a single workshop, seminar or training unit or a full course of instruction delivered at a distance. While similar to televised instruction, it is usually designed to incorporate the presentational characteristics of television. A two-way communication link permits participants to interact with each other. Video conferencing and televised instruction (if a two-way communication link is provided) are also described as interactive television. We will discuss this in greater detail later.

The video supplements in the COMPETE Learning program are examples of pre-produced videos. Some of these video supplements are used as reinforcement or enrichment to the concepts that are discussed in the module.

**Activity 2.6**

Think of the subject area/s you are teaching. What topics do you think can be better taught using video/television?

Video and television are best used in explaining complex and abstract concepts. For example, if you want to teach your students about the characteristics of the different planets, video/television is a good medium to use. The use of video and television will allow your students to see for themselves actual footages of the planets which they would otherwise just imagine. Read on to find out more about the applications of video as well as its advantages.

**Study**

## Advantages of Video/Television

Video/ television offers many advantages, among these are:

- Since most people have watched television, the medium is familiar.
- Motion and visuals can be combined in a single format so that complex or abstract concepts can be illustrated through visual simulation. The old cliche "a picture is worth a thousand words" rings true.

- Instructional television is an effective way to take students to new environments (the moon, a foreign country, or through the lens of a microscope).
- Time and space can be collapsed, so that events can be captured and relayed as they happen.
- It is very effective for introducing, summarizing, and reviewing concepts.
- It can be used effectively as a motivational tool.

**Reflect**

Earlier, you have identified the topics you want think can be better taught using video/television. What would limit you from using video/television?

**Study**

## Limitations of Video/Television

- Professional video is expensive and time consuming. Broadcast quality production requires access to sophisticated studio facilities.
- Sites choosing to participate in an interactive video program may require specialized equipment, facilities, and staffing.
- Most prepackaged video courses use a mass media approach to instruction aimed at the average student. As a result, they can be ineffective in serving students with special needs.
- When used passively, without interaction, its instructional effectiveness can be limited.
- Unless professionally produced, completed video programs often look amateurish.
- Once completed, video programs can be difficult to revise and update.

**Activity 2.7**

If you are to conduct a lesson using video/television, what preparations will you do and why? Write down your answers below.

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**Study**

## Videoconferencing

Interactive Videoconferencing (IV) is an effective tool that may be used in distance education settings. This system can be integrated into the distance education program with minimal adaptation to the curriculum and course and is designed to support two-way video and audio communication between multiple locations.

Interactive videoconferencing is commonly used to connect two locations using sophisticated computer technology. Each group (in each location) can see and talk to each other through a monitor (usually television monitors). Various forms of instructional technology can be

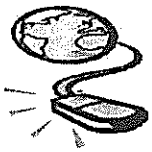
incorporated into IV, including video cassette recorders/players, microphones, cameras, and computers.

Some systems are also capable of simultaneously connecting more than two sites.

## Types of Videoconferencing Systems

- Small room videoconferencing. This system is designed primarily for small groups (1-12 participants) at all sites seated around a conference table.
- Classroom videoconferencing. This type of system allows many participants to be seen on the monitors.
- Desktop videoconferencing. This system utilizes a personal computer and videoconferencing software. These systems are less expensive, but offer limited resolution. They are most effective for individual and small group use.

**Browse the Web**



If you want to see examples of how instructors use videoconferencing in distance education, go to this site: http://www.kn.packbell.com/wired/vidconf/ideas.html. Click on the links on this site to get more information about videoconferencing.

**Reflect**

What do you think are the advantages of videoconferencing over pre-packaged videos? In what areas or subjects might it be most suitable for? Write your answers below.

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**Study**

## Advantages of Videoconferencing

Interactive videoconferencing can be effective because it:

- Allows "real time" visual contact between students and the instructor or among students at different sites.
- Supports the use of diverse media. Blackboards, handwritten documents, and videos may be incorporated at all sites.
- Enables connection with experts in other geographical locations.
- Can provide access to at-risk or special needs students.
- Provides additional access to students at remote sites.

## Limitations of Interactive Videoconferencing

As with any technology, interactive videoconferencing has its limitations:

- The initial cost of the equipment and leasing the lines to transmit conferences may be prohibitive.
- Unless a strong effort is made by the instructor, students not located with the instructor may remain uninvolved in the course.
- If visuals, like handwritten or copied materials, are not properly prepared, students may have a difficult time reading them.
- Technical problems. For example, if the "pipe" that carries the transmission among sites is not large enough, the students may observe "ghost images" when rapid movement occurs in "real time." Also, if the system is not properly configured, class members may observe an audio "echo" effect. The result is audio interference that detracts from the learning environment.

**Reflect**

If you have access to videoconferencing technology, for what purpose would you use it and how?

**Study**

## Using Videoconferencing

When designing instruction to be delivered over videoconferencing system, the instructor should focus attention on all students, not just those at the "home" site. Lessons should incorporate a variety of activities for all the students at the various sites. Use small group activities, student presentations and an occasional break to add variety to the lesson. It is often helpful to bring guest speakers at one or more of the distant sites. This will encourage involvement of the distant students, as well as allowing the students at the origination site to "see what it is like" to have the teacher at another location.

In instructing using videoconferencing, make sure that you:

*Establish Class expectations*. Some students may adopt the "TV" attitude, expecting the course to be entertaining, not educational. Address this attitude through well-planned and focused presentations with emphasis on teacher-student interaction.

*Encourage Dialogue*. By asking questions and noting body language, instructors can ascertain the interest and comprehension of the students at both sites. This kind of attention will make all students feel more comfortable.

**Reflect**

What forms of distance education are you aware of that are delivered using a computer?

**Study**

## Computers

In recent years, educators have witnessed the rapid development of computer networks, dramatic improvements in the processing power of personal computers, and striking advances in magnetic

storage technology. These developments have made the computer a dynamic force in distance education, providing a new and interactive means of overcoming time and distance to reach learners.

Computer applications for distance education fall into four broad categories:

- .Computer Assisted Instruction (CAI) - uses the computer as a self-contained teaching machine to present discrete lessons to achieve specific but limited educational objectives. There are several CAI modes, including: drill and practice, tutorial, simulations and games, and problem-solving.
- Computer Managed Instruction (CMI) - uses the computer's branching, storage, and retrieval capabilities to organize instruction and track student records and progress. The instruction need not be delivered via computer, although often CAI (the instructional component) is combined with CMI.
- Computer Mediated Communication (CMC)- describes computer applications that facilitate communication. Examples include electronic mail, computer conferencing, and electronic bulletin boards. The COMPETE Learning Program falls under this category. Notice that you are using the internet to browse the web, do some activities, use a bulletin board or your assignment.
- Computer-Based Multimedia- HyperCard, hypermedia, and a still-developing generation of powerful, sophisticated, and flexible computing tools have gained the attention of distance educators in recent years. The goal of computer-based multimedia is to integrate various voice, video, and computer technologies into a single, easily accessible delivery system.

**Reflect**

Why do you think the use of computers helped popularize distance education? Write your ideas on the lines below. Then, compare your ideas with the discussion that follows.

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**Study**

The use of computers in distance education popularized distance education because computers made distance education more accessible to people.

- Computers can facilitate self-paced learning. In the CAI mode, for example, computers individualize learning, while giving immediate reinforcement and feedback.
- Computers are a multimedia tool. With integrated graphic, print, audio, and video capabilities, computers can effectively link various technologies. Interactive video and CD-ROM technologies can be incorporated into computer-based instructional units, lessons, and learning environments.

- Computers are interactive. Microcomputer systems incorporating various software packages are extremely flexible and maximize learner control.
- Computer technology is rapidly advancing. Innovations are constantly emerging, while related costs drop. By understanding their present needs and future technical requirements, the cost-conscious educator can effectively navigate the volatile computer hardware and software market.
- Computers increase access. Local, regional, and national networks link resources and individuals, wherever they might be. In fact, many institutions now offer complete undergraduate and graduate programs relying almost exclusively on computer-based resources.

However, the use of computers has its limitations.

- Computer networks are costly to develop. Although individual computers are relatively inexpensive and the computer hardware and software market is very competitive, it is still costly to develop instructional networks and purchase the system software to run them.
- The technology is changing rapidly. Computer technology evolves so quickly that the distant educator focused solely on innovation "not meeting tangible needs" will constantly change equipment in an effort to keep pace with the "latest" technical advancements.
- Widespread computer illiteracy still exists. While computers have been widely used since the 1960's, there are many who do not have access to computers or computer networks.
- Students must be highly motivated and proficient in computer operation before they can successfully function in a computer-based distance learning environment.

Through the computer, we are able to access the Internet. Today, the Internet offers many possibilities for distance education.

## The Internet and Distance Education

The Internet is the world's largest, most powerful computer network connecting personal computers, sophisticated mainframes, and high speed supercomputers around the globe. As more and more colleges, universities, schools, companies, and private citizens connect to the Internet either through affiliations with regional not-for-profit networks or by subscribing to information services provided by for-profit companies, more possibilities are opened for distance educators to overcome time and distance to reach students.

With access to the Internet, distance educators and their students can use:

- Electronic mail (e-mail) - Like postal mail, e-mail is used to exchange messages or other information with people. Instead of being delivered by the postal service to a postal address, e-mail is delivered by Internet software through a computer network to a computer address.
- Bulletin boards - Many bulletin boards can be accessed through the Internet. Two common public bulletin boards on the Internet are USENET and LISTSERV. USENET is a collection of thousands of topically organized newsgroups, covering everything from supercomputer design to

bungee cord jumping, and ranging in distribution from the whole world to single institutions. LISTSERV also provides discussion forums on a variety of topics broken out by topic or area of special interest.

- World-Wide Web (WWW) -The WWW is an exciting and innovative front-end to the Internet. Officially WWW is described as a "...wide-area hypermedia information retrieval initiative aiming to give universal access to a large universe of documents" (Hughes, 1994). The WWW provides Internet users with a uniform and convenient means of accessing the wide variety of resources (pictures, text, data, sound, video) available on the Internet. Popular software interfaces, such as Mosaic and Netscape, facilitate navigation and use of the WWW. The central organizing feature of the WWW is the "home page". Every organization and even every individual user of the WWW can create a home page that contains whatever information they want to present. For example, the homepage of SEAMEO – INNOTECH is http://www.seameo-innotech.org. The hypertext capabilities of the WWW facilitate linking of information within your own home page and with all other home pages on the WWW.

**Activity 2.8**

Assume that you are a distance education instructor. How might you use the Internet in teaching? Write your ideas on a separate sheet of paper.

Let's compare what you wrote down to the next discussions.

**Study**

## Instructional Possibilities of the Internet

Distance educators can use the Internet and WWW to help students gain a basic understanding of how to navigate and take full advantage of the networked world into which they will be graduating. Some instructional possibilities of the Internet include:

- Using e-mail for informal one-to-one correspondence. Feedback from the instructor can be received more quickly than messages sent by mail. Students can read messages at their convenience and easily store them for later reference. For example, in the COMPETE Learning Program, you send your assignments through e-mail and you also receive feedback through e-mail.
- Establishing a classroom bulletin board. Distant students often work in isolation without the assistance and support of fellow students. Setting up a class bulletin board can encourage student-to-student interaction. With a class computer conference, individual students can post their comments or questions to the class, and every other individual is free to respond. The conference can also be used to post all modifications to the class schedule or curriculum, assignments/tests, and answers to assignments/tests.
- Engaging students in dialogue with other students, faculty, and researchers by encouraging them to join a bulletin board(s) on topic(s) related to the class.
- Developing a classroom home page. The home page can cover information about the class including the syllabus, exercises, literature references, and the instructor's biography. An

example of a classroom homepage is: *http://www.chatham-nj.org/coin/was/welcome.htm*. You may go to this site to familiarize yourself classroom homepages. You may also search for other classroom homepages in the Internet. In a homepage, the instructor can also provide links to information on the WWW that would be useful to students in the class (e.g., real research data on agricultural markets, global climate change, or space missions). Other links could access library catalogs or each student's individual home page.

- Course & Instructor Information — Include such items as course topics to be covered, your office hours, textbook information, course objectives, and grading policies.
- Class Communication — Provide access to your e-mail, link to discussion groups that you have set up for student-to-student communication, and create forms that your students can use to report problems or provide biographical information about themselves.
- Assignments and Tests — Distribute assignments and tests, provide for online completion or submission, and give solutions, hints, or samples of what you expect.
- Material covered in the classroom — Make lecture notes and handouts available either as web pages or as downloadable files.
- Demonstrations, Animation, Video, Audio — This is more complex than other suggestions and will require that your students have access to computers with sound and video cards.
- Reference Material — List materials in print and electronic form that supplement the textbook. To avoid copyright problems, electronic articles should either be written by you or in the public domain (e.g., government documents or are already available on the WWW with author's permission to distribute). In addition, provide links to other pages which cover information on the topic, similar courses that may also be available on WWW, your university library, and other on-campus resources that may help your student complete the course.

**Activity 2.9**

Search the web for more free, on-line course samples. Study the structure of these on-line courses. Write down your observations and discuss them with your co-learners.

**Reflect**

What do you think are the important considerations to think of before integrating the Internet into a distance education program?

**Study**

## Teaching Considerations

When incorporating the Internet into a distance delivered course, remember that:

- All students in a course must have Internet and WWW access to ensure equal opportunities for computer interaction and feedback. Also, convenient access to a computer at home or work may influence student success.

- Students may face the concurrent challenges of learning basic computer skills, new software, and appropriate online communication skills. Trouble-shooting student computer problems will probably become a part of normal instructional responsibilities. Setting up a specific classroom conference for ongoing discussions of specific hardware and software problems may help students to work through these problems on their own.
- Some students might hesitate to contribute to computer conferences or to send e-mail because of a lack of familiarity with the proper protocols. Encourage students to use e-mail, classroom conferences, electronic bulletin boards, and the WWW early in the course so they overcome inhibitions. Specifying a minimum number of e-mail communications per week will encourage active participation.
- Using e-mail can help the instructor provide feedback more quickly than surface mail or telephone. Prompt response generally increases student motivation and performance.
- Prompt responses might not always be appropriate. Computer conferences can foster student-to-student interaction. To ensure that this interaction is sustained, work towards a facilitative role. It might be appropriate to delay response to a query in a classroom conference in order to allow students to respond to the issue and to each other.
- Becoming familiar with the resources available on the Internet and the most effective ways to use them will be part of the instructional challenge. A number of helpful guides to the Internet and WWW are available .

### Activity 2.10

**Reflect**

Reflect on your experience in using computers as a distance education tool. How did it help or hinder your learning? What are the high points and low points of your experience in using the computer? Write down your answers on a separate sheet of paper.

Reflect on the pros and cons of using each technology in distance education. Which technology do you think is best? Why?

**Study**

## Which Technology is Best?

Although technology plays a key role in the delivery of distance education, educators must remain focused on instructional outcomes, not the technology of delivery. The key to effective distance education is focusing on the needs of the learners, the requirements of the content, and the constraints faced by the teacher, before selecting a delivery system. Typically, this systematic approach will result in a mix of media, each serving a specific purpose. For example:

- A strong print component can provide much of the basic instructional content in the form of a course text, as well as readings, the syllabus, and day-to-day schedule.
- Interactive audio or video conferencing can provide real time face-to-face (or voice-to-voice) interaction. This is also an excellent and cost-effective way to incorporate guest speakers and content experts.
- Computer conferencing or electronic mail can be used to send messages, assignment feedback, and other targeted communication to one or more class members. It can also be used to increase interaction among students.
- Pre-recorded video tapes can be used to present class lectures and visually oriented content.
- Fax can be used to distribute assignments, last minute announcements, to receive student assignments, and to provide timely feedback.

Using this integrated approach, the educator's task is to carefully select among the technological options. The goal is to build a mix of instructional media, meeting the needs of the learner in a manner that is instructionally effective and economically prudent.

**Summary**

In this lesson, you learned that distance education can be delivered through:

- Print materials
- Video/Television
- Videoconferencing
- Computers
- Internet

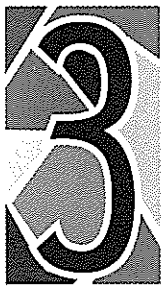
Distance education materials can likewise be delivered through audio tapes or a combination of the various modes. Each of these modes has their own advantages and limitations. The key to effective distance education is to focus on the needs of learners, requirements of the content and the constraints faced by the teacher before choosing a delivery system.

The key players in distance education programs are the students, faculty, facilitators, support staff and administrators.

**Apply What You Have Learned**

Assume that you are going to create a distance education course. What technologies or combination of technologies are you going to use and why? Explain your answer.

LESSON



# The Challenge of Making Distance Education Work

The question now is, will you go for distance education. Or perhaps, do you prefer distance education over face-to-face teaching? In this lesson, you will learn studies about those who took distance education show. After this lesson, you should be able to explain why distance education is a good alternative to traditional education.

**Reflect**

Which do you think is better, distance education or traditional education and why?

Distance education and traditional face-to-face instruction should not be pitted against each other. Distance education should not be seen as a system that will replace face-to-face instruction. It is another form of learning and gaining knowledge. It is an alternative to face-to-face instruction.

As a teacher, there are two possibilities for you in terms of distance education. The first one is to teach at a distance and the second one is to study at a distance. Teaching at a distance will require you to create courses that are delivered in one mode or a combination of modes. Studying at a distance on the other hand will require you to access information and material. In each endeavor, there are challenges that you will have to face. However, distance education is very promising. It is as good if not better than traditional teaching and learning. In this lesson, we will look further into the challenges faced by distance education students and instructors.

**Reflect**

What do you think are the essential elements or important considerations in creating distance education programs? Compare your answers with the discussions that will follow.

**Study**

## Effective Distance Education

Without exception, effective distance education programs begin with careful planning and focused understanding on the course requirements and student needs. Appropriate technology can only be selected once these elements are understood in detail. There is no mystery to the way effective distance education programs develop. They do not happen spontaneously; they evolve through the hard work and dedicated efforts of many individuals and organizations. In fact, successful distance education programs rely on the consistent and integrated efforts of students, faculty, facilitators, support staff and administrators.

In creating distance education programs, it is important to settle important issues such as:

- Planning issues – This includes determining the role of distance education in meeting the educational needs of your audience, clarifying target group of learners and considering teaching methods and media options.
- Design and Development Issues - This includes determining what media will be used to deliver learning, how the resources will be developed and delivered and the instructional design to be followed in the materials.
- Production issues – This includes determining the schedule, mode of production (in house or external), packaging, handling and distribution, and storage and copyright issues.
- Delivery issues – This includes specifying what hardware, facilities and equipment are needed for the delivery of learning and what kind of support staff are required for the delivery of materials .
- Evaluation and Assessment Issues – This includes determining the assessment criteria, methodology, self-assessment strategies and procedures and other formal and informal evaluation and feedback mechanisms.
- Course administration issues – This includes discussions on policies, admission issues, control of assignments, financial management, day-to-day administration and contact with students and quality control.
- Student Support issues – This includes discussions on what additional resources are required for supporting the learning and what support structures and systems will be put in place to provide feedback to students on their progress and other student concerns.
- Budgetary issues – This includes determining to what extent distance education can be implemented considering the cost requirements. Read the article below for a more details discussion on budgetary issues in distance education.

## Cost vs. Benefits

When establishing a distance education program, one of the first things considered is the cost of the system. Several cost components factor into the design of a distance education system:

- Technology - hardware (e.g., videotape players, cameras) and software (e.g., computer programs).
- Transmission - the on-going expense of leasing transmission access (e.g., T-1, satellite, microwave).
- Maintenance - repairing and updating equipment.
- Infrastructure - the foundational network and telecommunications infrastructure located at the originating and receiving campuses.
- Production - technological and personnel support required to develop and adapt teaching materials.

- Support - miscellaneous expenses needed to ensure the system works successfully including administrative costs, registration, advising/counseling, local support costs, facilities, and overhead costs.
- Personnel - to staff all functions previously described.

Although the costs of offering distance education courses may be high, there are high costs associated with offering conventional courses. Benefits of distance education courses to the learner include:

- Accessible training to students in rural areas.
- Students may complete their course of study without suffering the loss of salary due to relocation.
- Students are exposed to the expertise of the most qualified faculty.

Perhaps the question institutions must answer is whether it is part of their mission as educators to offer programs to those who might not be reached without distance education. The primary benefit to educational institutions through distance education may be the increased number of non-traditional students they are able to attract and serve. Research also suggests that as programs become more efficient, program costs should decrease.

**Activity 3.1**

Assume that you are going to be the Project Manager of a soon to be established distance education program in your school. What specific issues (i.e. regarding planning, design and development etc.) should your project team be able to answer? Write your answer on a separate sheet of paper.

The following is an example of some specific planning issues which you may need to tackle.

Planning issues to settle:

- Who will be our target learners?
  - OSY youths in the community?
  - students?
  - teachers?
- What are the characteristics of our learners?
- What will be the management structure?
  - Who will be part of the management team?
  - What are the qualifications of the members of the project development team?

**Study**

## Distance Teaching

Good distance teaching practices are fundamentally identical to good traditional teaching practices and "those factors which influence good instruction may be generally universal across different environments and populations." Because distance education and its technologies require extensive

planning and preparation, distance educators must consider the following in order to improve their effectiveness:

- Extensive pre-planning and formative evaluation is necessary. Teachers cannot "wing it". Distance learners value instructors who are well prepared and organized.
- Learners benefit significantly from a well-designed syllabus and presentation outlines. Structured note taking, using tools such as interactive study guides, and the use of visuals and graphics as part of the syllabus and presentation outlines contribute to student understanding of the course. However, these visuals must be tailored to the characteristics of the medium and to the characteristics of the students.
- Teachers must be properly trained both in the use of equipment and in those techniques proven effective in the distance education environment. Learners get more from the courses when the instructor seems comfortable with the technology, maintains eye contact with the camera, repeats questions, and possesses a sense of humor.

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.

Without the use of a real-time visual medium such as television, the teacher receives no visual information from the distant sites. The teacher might never really know, for example, if students are asleep, talking among themselves or even in the room. Separation by distance also affects the general rapport of the class. Living in different communities, geographic regions, or even states deprives the teacher and students of a common community link.

Because of these challenges 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
- Involve outside speakers who would otherwise be unavailable
- Link students from different social, cultural, economic, and experiential backgrounds

## Studying at a distance

Research suggests distant students bring basic characteristics to their learning experience which influence their success in coursework. Distance education students are voluntarily seeking further education.

- Have post-secondary education goals with expectations for higher grades.
- Are highly motivated and self-disciplined.
- Are older.

Studies also conclude that similar factors determine successful learning whether the students are distant or traditional. These factors include:

- Willingness to initiate calls to instructors for assistance.
- Possessing a more serious attitude toward the courses.
- Employment in a field where career advances can be readily "achieved through academic upgrading in a distance education environment".
- Previous completion of a college degree.

Research indicates that the instructional format itself (e.g., interactive video vs. videotape vs. "live" instructor) has little effect on student achievement as long as the delivery technology is appropriate to the content being offered and all participants have access to the same technology. Other conclusions drawn from this line of research suggest:

- Achievement on various tests administered by course instructors tends to be higher for distant as opposed to traditional students, yet no significant difference in positive attitudes toward course material is apparent between distant and traditional education.
- Conventional instruction is perceived to be better organized and more clearly presented than distance education.
- The organization and reflection needed to effectively teach at a distance often improves an instructor's traditional teaching.
- Future research should focus on the critical factor in determining student achievement: the design of instruction itself.

**Activity 3.2**

Some people may argue that there is not enough communication and interaction in distance education that will facilitate learning. What can you say about this?

**Study**

## How Important is Interaction?

Many distant learners require support and guidance to make the most of their distance learning experiences. This support typically takes the form of some combination of student-instructor and student-student interaction.

Research findings on the need for interaction have produced some important guidelines for instructors organizing courses for distant students:

- Learners value timely feedback regarding course assignments, exams, and projects.
- Learners benefit significantly from their involvement in small learning groups. These groups provide support and encouragement along with extra feedback on course assignments. Most importantly, the groups foster the feeling that if help is needed it is readily available.
- Learners are more motivated if they are in frequent contact with the instructor. More structured contact might be utilized as a motivational tool.
- Utilization of on-site facilitators who develop a personal rapport with students and who are familiar with equipment and other course materials increases student satisfaction with courses.
- The use of technologies such as fax machines, computers, and telephones can also provide learner support and interaction opportunities.

## Apply What You Have Learned

Reflect on your own situation. What challenges will you face if:

- you are to head a team that will come up with a distance education program in your school?
- you are to teach at a distance?
- you are to study at a distance?

Use a separate sheet of paper for your answers.

## Synthesis

Here are the important points to remember from the module.

- Distance education is instruction in which majority of the teaching occurs while educator and learner are at a distance from one another. Distance education is carried out by an organization that develops educational media to unite teacher and learner and provides appropriate evaluation of the learning.
- Printed and written correspondence by mail was the only mode of delivery utilized in most early distance education systems. Today, sophisticated technology is used to provide instruction to those that are disadvantaged by time and distance or physical disability.
- Open learning can occur at a distance or in a classroom. Open learning suggests the students freedom to choose when, where and how he/she is going to learn.
- Distance education can be delivered through print, television, videoconferencing, computers, internet among others. Distance education materials can likewise be delivered through audio tapes or a combination of the various modes. Each of these modes has their own advantages and limitations.
- The key players in distance education programs are the students, faculty, facilitators, support staff and administrators.

- Teaching at a distance challenges the teacher/instructor to be creative in delivering information and knowledge. Teaching at a distance requires a lot of planning and preparation on the part of the teacher.
- Researches on distance education have concluded that learning in traditional education and distance education is essentially the same.
- Before embarking on a distance education program a cost benefit analysis is necessary. All cost components should be carefully evaluated as well as the expected benefits to learners and institution.

## What Have You Learned

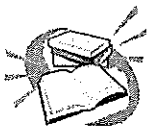
A. Create a brochure (can be three or four panels) about distance education. Assume that the brochure will be distributed to encourage people to teach and study at a distance. As such, make sure that your brochure is attractive and informative. Show your work to your co-learners.

B. Answer this: If you are to manage the COMPETE program, what delivery mode/s will you use and why?

### Application

Do the following.

1. Assume that your school is going to embark on a distance education program and you will the project manager. Come up with a proposal of a distance education program. Make sure that you include all the details such as target learners, technology to be utilized, how technology will be utilized, evaluation etc.
2. Browse the web for on-line courses that might be fit for you. Get information on how you can enroll in these courses. In the future, you may want to enroll in an on-line distance education course for your professional development. This activity will give you a better idea of how on-line course work as many institutions offering such courses provide free samples or trials.



## References


Clark. Thomas A. and Verduin, John R. Jr. (1991) *Distance Education, The Foundations of Effective Practice.* California: Jossey Bass, Inc.

Engineering Outreach, University of Idaho. (2002) *Distance Education at a Glance.* http://www.uidaho.edu/evo/dist1.html. June 10, 2002.

Garrison, D.R. (1989) *Understanding Distance Education, A Framework for the Future.* New York: Routledge.

Lockwood, Fred. (Ed.) (1995) *Open and Distance learning Today.* New York: Routledge.

Race, Phil. (1989) *The Open Learning Handbook, Selecting, Designing and Supporting Open Learning Materials.* New York: Nichols Publishing.

Willis, Barry. (Ed.) (1994) *Distance Education Strategies and Tools. New Jersey: Educational Technology Publications, Inc.*

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