

Identification of Criteria for  
Delivery of Theological Education  
Through Distance Education:  
An International Delphi Study

by

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(Abstract) Distance education is one means of delivering theological education which is being used increasingly. This delivery method is particularly helpful to nontraditional students who desire higher education but who cannot leave family and work commitments for residential study. For some in both developing and developed countries, distance education is the only route open to higher theological education. Criteria for assessing effective delivery of distance education have not been established in the literature. The purpose of this study was to identify such criteria.

Data were collected with a three-round Delphi from an international panel of seventy-four members comprised of denominational and non-denominational educational administrators and distance educators, denominational district representatives, accreditation representatives, and adult education representatives. Two pilot studies were conducted to test the questions used for round one. Criteria statements were retained if they were deemed "important" or "very important" by at least 80 percent of the respondents

on rounds two and three. The panel's responses were found to be independent of respondent location--national or international--and the category of the respondent's group membership.

The findings of the study led to the identification of a set of thirty-one criteria in eight categories which may be useful for evaluating existing distance education programs or guiding the development of new programs. The eight categories were ethical concerns, commitment, curriculum, evaluation, support, technology, feedback, and faculty. There was a 100 percent consensus in rating these thirty-one criteria as "important" or "very important" by the panel members.

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## Chapter 1

### INTRODUCTION TO THE STUDY

Distance education is a process of delivering formal instruction when the student and instructor are not in the immediate physical presence of each other. The instruction in these situations is mediated by some means of communication. Common forms of mediation are correspondence, broadcast, tape--audio or video, and computer links. The most common form is correspondence.

Distance education is not a recent phenomenon; it "began with the first letter from one person written to give instruction to another, and goes back to such classic examples as Plato's epistles to Dionysius and the letters of the Elder Pliny to the Younger Pliny" (Erdos, 1967, p. 2).

One of the oldest compilations of distance education material is the Bible. The Bible, particularly the New Testament, is comprised of books written to inform and instruct people with whom the author was unable to have face-to-face interaction. For example, the prison epistles of Paul were written to instruct churches while Paul was a prisoner. The Bible is also an example of separation in time and culture. It has continued to provide instruction during the almost two millennia since it was written. The Bible has been translated into every major language in the world and relates to people in cultures substantially

different from those of the writers.

Nor is distance education an "American" concept; it has received wide acceptance around the world.

The term distance education ... is a translation of several European terms.... It is important for American practitioners and scholars to know its origin and, as a result, to appreciate that distance education is a very international concept. The term unites them to colleagues in this most international field of practice and study in education. (Moore, 1990, p. xiv)

### **Concepts of Distance Education**

A comprehensive definition of distance education has not been developed or agreed upon. The following are attempts to establish a working definition of distance education by practitioners in the field. Distance education is--

education conducted through the postal service, radio, television, telephone or newspaper, without face-to-face contact between teacher and learner.

(Hedges, 1990, p. 1)

Distance education--

covers the various forms of study at all levels which are not under the continuous, immediate supervision of tutors present with their students

in the lecture room or on the same premises but which, nevertheless, benefit from the planning, guidance and teaching of a supporting organization. (Holmberg, 1989, p. 3)

Distance education's accessibility is a key characteristic.

Probably the most significant characteristic of distance education as currently practiced internationally is not the use of technology, but the fact that its organizing principle is the needs of the learner--that whatever the inherent demands of the content, it must be made accessible to the learner, first across the distances of space and time, and secondly across the distances of knowing and learning. (Granger, 1990, p. 147)

Distance education--

consists of all arrangements for providing instruction through print or electronic communications media to persons engaged in planned learning in a place or time different from that of the instructor or instructors. (Moore, 1990, p. xv)

For this study, distance education is any formally planned learning activity where less than 50 percent of the instruction involves face-to-face contact with an instructor. The mediated instruction may involve the use of print-based correspondence, electronic (computer)

correspondence, broadcast (via radio or television), or prerecorded tape media (audio or video).

When the term distance education is used, people often focus their thoughts on a particular technology or delivery system such as phone bridges, broadcast radio or television, or satellite uplinks. To a certain extent, in common perception, the philosophic orientation and basis of distance education is lost in specific applications of "new" technology. It can be analogous to the phrase, "the forest is lost in the trees." A philosophical basis should drive the application of technological methods, rather than technological methods looking for an application and a philosophical basis.

#### **Statement of the Problem**

One of the main components of what is known as the great commission of the Lord to the church is, "Go ye therefore, and teach all nations, ..." (Matthew 28:19). Since those words were spoken centuries ago, people have been striving to fulfill this commission. In Christian evangelical movements and denominations this commission is viewed as one of the major missions of the church. In the Assemblies of God this commission is seen as one of the three-fold purposes of the church and is a key element of its missions program.

Distance education permits students to receive a

Christian theological education without requiring the physical presence of an instructor. This factor becomes significant in the context of some third-world countries where Christian instructors and Christian theological schools are prohibited. In addition, students may not be able to attend a resident theological institution because of political, ideological, financial, or other reasons.

Distance education can overcome many of these difficulties.

Examples of distance education circumventing political and ideological barriers can be found in the former Soviet Union and South Africa. Until recently many individuals in the Soviet Union relied on distance education for theological instruction. Currently, individuals in several middle eastern nations rely on distance education to receive Christian theological instruction. The University of South Africa is serving both theological disciplines and non-theological disciplines. In 1989, 88,000 South African blacks were enrolled in higher education. Eighty-three per cent of those enrolled (73,040) were unable to attend residential schools. The only means open was distance education, so they enrolled in one of the two distance education institutions--University of South Africa or Vista University (Vergnani, 1992).

Finances, work, and family commitments are common limitations for many pastors in third-world nations and for

a number of pastors in developed nations as well. Many of the pastors in third-world nations and a number in the United States serve without the benefit of a formal theological education. In the Assemblies of God there are over 10,000 ministers who hold Christian worker or license credentials and need further schooling to fulfill the educational requirements for ordination (Berean, 1992). For these individuals, distance education is an avenue to obtain the formal theological education they are lacking.

#### **Purpose and Significance of the Study**

Distance education is a method being used increasingly to deliver theological education. A set of criteria has not been agreed on for assessing the effective delivery of theological education through distance education. The purpose of this study was to establish such criteria for the delivery of distance theological education programs that lead to baccalaureate or graduate degrees. There are several levels at which theological education takes place at a distance. Not included in this study are those programs intended for evangelism, primary and secondary instruction, and other programs which do not lead to degrees.

While correspondence education has been used for over 200 years (Erdos, 1967; Holmberg, 1989; Verduin & Clark, 1991), distance education, which includes correspondence education, has been rapidly developing in the last 20 years.

In light of the current rapidly changing society and the increasing emphasis on education, distance education has become a necessary delivery system for many institutions and individuals. Molly Corbett Broad, senior vice-chancellor for administration and finance for the California State University System stated, "We may not be able to afford traditional educational institutions for much of this decade or beyond" ("University systems...", 1992, p. A18). Institutions must be "much more productive, efficient, and cost effective in the delivery of services. The infrastructure and the technology associated with distance learning may offer the very best hope of keeping pace with state and national needs for an educated workforce" ("University systems...", 1992, p. A18).

Theological education leading to a degree, specifically in the traditional sense of a residential program, is unavailable to many who desire it. Some reasons for residential theological education being unavailable include financial limitations, geographical location of the school or student, political turmoil, family commitments, and work commitments. As stated earlier, distance education has been able to overcome these and other barriers.

Distance education is viewed in many developing countries as a means of meeting the educational needs of their populations in an efficient way (Arger, 1990a). While



modern technological means of communication may not be available to many in third-world nations, print-based communication via mail service is fairly universal and relatively inexpensive. The universality and low expense of the postal system allows distance theological education by correspondence to be a viable possibility for students not able to attend residential schools.

The importance of this type of delivery system in the Assemblies of God at this time is seen in the restructuring of the department of education, which took place in August 1991 at the General Council in Portland, Oregon. A separate higher education division was created by removing higher education from the division of education. The division has three departments: Nontraditional Education, Office of Development, and Postsecondary Education. Distance education is a major component of the Non-traditional Education Department. Distance education is seen as a necessary facet of the new higher education division.

At least two Assemblies of God colleges are planning to establish distance education programs in the next two to five years, but few guidelines exist for them to follow. The criteria or guidelines identified by this study may be useful in implementing high quality distance education programs for these colleges.

The historical background and recent developments in

delivery have transformed the field of distance education from a strictly correspondence delivery system to a multi-dimensional delivery system. But, there is need of further study of the effectiveness of distance education. Mark (1990) stated there is a need to "begin to define and examine those variables that seemingly contribute to success and effectiveness in distance learning programs" (p. 20). Donaldson (1990) asked, "How should effectiveness be defined in distance education programs? ... What are the forces that gave rise to successful distance education programs?" (p. 9). Murgatroyd and Woudstra (1990) identified a need for "studies of institutional effectiveness and performance indicators,[sic] and detailed studies of the extent to which distance education systems operate effectively in terms of their strategic plans" (p. 55).

### **Limitations**

The field of distance education is extensive, and a single study cannot cover the many facets involved with such a broad delivery system. This study was limited to identifying criteria for delivery of theological education leading to two-year, four-year, and graduate theological degrees using a distance education format.

### **Summary and Overview**

Instruction in the absence of face-to-face contact has taken place for thousands of years. Present-day situations

in both developing and developed nations make theological study in resident programs difficult or impossible for some people. Distance education is a means of providing theological education to these individuals. It can also be used as a means of fulfilling part of the Biblical command stated in the great commission: "Go ye therefore, and teach all nations ..." (Matthew 28:19). One denomination, the Assemblies of God, has used distance education as one type of delivery system in its higher education system, and, it expects to increase the use of this delivery system.

Chapter 2 contains a brief historical background of the development of distance education as a delivery system. The need for identifying criteria for effective delivery of distance education is included. The background and development of the Delphi technique are reviewed, and the appropriateness of the technique's use in this study is presented.

Chapter 3 contains the plan for a pilot test and a description of the three-round Delphi technique used to collect data. The Delphi technique was used to build a consensus around criteria identified as important for assessing effective delivery of distance theological education. The first-round instrument consisted of five open-ended questions. It was sent to six groups of experts: (1) Assemblies of God college administrators, (2) Assemblies

of God distance education representatives, (3) non-Assemblies of God distance educators, (4) accreditation representatives, (5) adult and continuing education representatives, and (6) Assemblies of God district superintendents. A second-round instrument was constructed from the responses in the first round, and a third-round instrument was constructed from the responses in the second round.

The findings of the pilot tests and three-round Delphi study are presented in Chapter 4.

A summary, conclusions, and recommendations based on the findings of the study are presented in Chapter 5.

## Chapter 2

### REVIEW OF THE LITERATURE

#### Historical Overview of Distance Education

A historical overview of the development of distance education during the past three centuries will aid in establishing a context for this study. Table 1 contains a list of the significant dates in the development of distance education. Although aspects of distance education go back to Plato (Erdos, 1967) and the early Christian writers, the information in the table shows that the developments of the last three centuries have had a substantial impact on the field of distance education.

Distance education in the form of correspondence study had an early entrance in the United States. The earliest advertisement for correspondence study appeared in the *Boston Gazette* on March 20, 1728. The *Gazette* ran an advertisement for shorthand lessons by mail (Valore & Diehl, 1987). The advertisement stated:

Caleb Philipps, Teacher of the New Method of Short Hand, is remov'd opposite to the north door of the Twon House in King-street. As this way of Joyning 3, 4, 5 &c. words in one in every Sentence by the Moods, Tenses, Persons, and Verb, do's not in the least spoil the Long Hand, so it is not anything like the Marks for Sentences in the Printed

Table 1

Significant Dates in the Development of Distance Education

<u>Date</u>	<u>Event</u>
1639	The first American postal service was established in Massachusetts (Funk & Wagnalls, 1986).
1728	Boston <u>Gazette</u> advertisement for shorthand (March 20) by Caleb Philipps (Valore & Diehl, 1987).
1833	Swedish newspaper advertisement for composition (Verduin & Clark, 1991).
1840	Uniform penny postage introduced in England (Funk & Wagnalls, 1986).
1840	Isaac Pitman, in England, began teaching shorthand by correspondence using short passages from the Bible (Verduin & Clark, 1991).
1856	Charles Tossaint and Gustav Langenscheidt, Berlin, Germany, founded a modern language correspondence school (Verduin & Clark, 1991).
1873	Anna Eliot Ticknor founded the Society to Encourage Study at Home (Aggasiz, 1971).
1874	Correspondence instruction experiments began at Illinois Wesleyan University (Moore, 1990; Verduin & Clark, 1991).
1881	William Rainey Harper initiated the Correspondence School of Hebrew (Garrison, 1989).
1882	Chautauqua Correspondence College, New York, founded (Verduin & Clark, 1991; Valore & Diehl, 1987).

Continued on next page

1883	The Correspondence University founded in Ithaca, NY (Moore, 1990; Verduin & Clark, 1991).
1890	University of Chicago President William Rainey Harper founded the first university-level correspondence courses (Moore, 1990, Verduin & Clark, 1991).
1891	Pennsylvania newspaper editor Thomas J. Foster began teaching mining methods and safety by correspondence. This led to the formation of International Correspondence Schools (Verduin & Clark, 1991).
1898	H. S. Hermod founded namesake institution in Sweden (Holmberg, 1986).
1906	The Calvert School, Baltimore, Maryland. Elementary Schooling by Correspondence (Verduin & Clark, 1991).
1906	Founding of University of Wisconsin Extension (distance teaching unit) (Verduin & Clark, 1991).
1906	The first radio broadcast in the United States was made (Funk & Wagnalls, 1986).
1911	University of Queensland, Australia, entered distance education (Holmberg, 1986).
1922	University of Wisconsin professors started WHA, the first federally licensed radio station devoted to educational broadcasting (Verduin & Clark, 1991).
1926	The National Home Study Council (NHSC) created. (Now a member of the Council of Post-Secondary Accreditation,

COPA).

(Valore & Diehl, 1987; National Home Study Council, 1992)

1927 The first public television broadcasts in England (Funk & Wagnalls, 1986).

Continued on next page

1930 The first public television broadcasts in the United States (Funk & Wagnalls, 1986).

1932 Educational television broadcasting originated at the University of Iowa's W9XK (Verduin & Clark, 1991).

1939 The French government established, Centre National de Tele-Enseignement, a government correspondence college (Holmberg, 1986).

1947 The University of South Africa founded as a correspondence school with no residential students (In 1991 it had an enrollment of over 100,000.) (Labuschagne, 1991).

1960 The first communications satellite Echo 1 was launched by the United States (Funk & Wagnalls, 1986).

1967 International Correspondence Institute in Brussels, Belgium, founded as a theological institution for students in any country (no residential students) (International Correspondence Institute, 1990).

1969 Open University in England founded as a distance learning university (Keegan, 1986; Garrison, 1989; Holmberg, 1989).

1975 FernUniversitat (the Distance University) founded in Hagen, West Germany (Holmberg, 1986).

1981 The Public Broadcasting System (U.S.A.) aired its first college-credit course on television ("Public Broadcasting System's...", 1991).



1982 International Council for Correspondence Education (ICCE) changed its name to International Council for Distance Education (ICDE) (Holmberg, 1986).

Continued next page

1984 National Technological University, a consortium of university engineering schools, was established to deliver degree programs by satellite (Verduin & Clark, 1991).

1988 The United States Distance Learning Association (USDLA) founded (USDLA, 1992).

1989 The Agricultural Satellite Corporation established. During the 1991-92 academic year, 38 land-grant universities were affiliated with AgSat (Watkins, 1992).

1992 Senate Bill 2377 introduced to facilitate the acquisition of a dedicated educational satellite system (Burns, 1992).

Character Books being all wrote according to the Letter, and a few Plain and Easy Rules. N.B. Any Persons in the Country desirous to Learn this Art, may by having the several Lessons sent Weekly to them, be as perfectly instructed as those that live in Boston. (p. 1)

"This early American advertisement advised readers to "note well" (n.b.) that shorthand could be perfectly instructed by home study" (Valore & Diehl, 1987, p. 1).

In 1833, a Swedish newspaper ran an advertisement offering a course in composition by mail (Verduin & Clark, 1991). About the same time (1840) in England, Isaac Pitman, who is "generally recognized to be the first modern distance educator" (Verduin & Clark, 1991, p. 15), began teaching shorthand by correspondence in Bath. Charles Toussaint and Gustav Langenscheidt founded a modern language correspondence school in Berlin, Germany, in 1856, which still publishes instructional materials under Langenscheidt's name" (Verduin & Clark, 1991, p. 16).

In 1873, Anna Eliot Ticknor, "the mother of American correspondence study," founded the Society to Encourage Study at Home. This society originated the process of exchanging comments, questions, and answers as well as grades with students (Aggasiz, 1971). The first major program of correspondence instruction at the university level was established at the University of Chicago by

William Rainey Harper in 1890, following the early experiments in 1874 at Illinois Wesleyan College; in 1883 at the Correspondence University in Ithaca, New York; and in 1882 at the Chautauqua Correspondence College, New York (Moore, 1990; Verduin & Clark, 1991).

William Rainey Harper is referred to as the father of correspondence education. Garrison (1989) stated:

The reason for this title was that, in 1881, Harper initiated the Correspondence School of hebrew [sic]. Shortly after this, he helped organize a similar correspondence program at the Chautauqua University, and in 1892 he became president of the University of Chicago and established the first university correspondence program in the Extension Division. (p. 51)

Two significant developments took place in 1906. The first was the establishment of the Calvert School in Baltimore, Maryland, which brought correspondence study to elementary schooling. The Calvert School's program has been frequently used by American diplomats stationed overseas for the education of their children. The second was the founding of the University of Wisconsin Extension Unit, which has remained one of the "preeminent American distance teaching units" (Verduin & Clark, 1991, p. 17).

Distance education has been gaining importance and

credibility during the last two-and-a-half centuries. Today, distance education for college credit is a worldwide phenomenon. Kaye (1988) stated, "The International Council for distance Education (ICDE) has estimated that there are currently around 10 million students taking degree courses at a distance in the world" (p. 43).

Distance education had it's origin in correspondence education. "In 1982, at its 12th conference, the International Council for Correspondence Education changed its name to the International Council for Distance Education" (Garrison, 1989, p. 1). Both in Western Europe and in the United States the concept of distance education brings to mind technological advances in telecommunications via satellite, cable, and computer.

Even in a technologically advanced nation, the role of print-based distance education by correspondence is strong. The printed study guide is still the foundation of telecommunications courses as well as print-based courses. As of 1988 there were 241 institutions, accredited by accrediting agencies recognized by the U.S. Department of Education, offering correspondence courses in 544 subject areas. Of the 241 institutions, 90 offered courses in religious studies, about 17% of the total subject areas available for study.

Each year approximately three million students pursue

their education via correspondence in the United States (MacMillian, 1988). "Since 1900, over 70 million Americans have studied by mail, including Franklin D. Roosevelt, Walter P. Chrysler, Walter Cronkite, Barry Goldwater, Charles Schulz, and many other distinguished Americans" (Valore & Diehl, 1987, p. 2).

Moore (1990) noted that the differing branches of the armed forces have correspondence schools, with the airforce correspondence school enrolling "some 400,000 persons annually" (p. xvi). Verduin and Clark (1991) put the military enrollment at almost 700,000 a year. Valore and Diehl (1987) of the National Home Study Council stated, "Today, the single largest provider of correspondence study instruction is the U.S. Government; its military and non-military home study institutes enroll over two million students annually" (p. 4). In most third world nations the delivery system is limited, with the primary emphasis on mail or correspondence (Harris & Williams, 1977; UNESCO, 1987; Arger, 1990).

In 1969 the Open University in Great Britain was born. It is currently considered to be the most influential distance education institution in the world (Garrison, 1989; Holmberg, 1989; Verduin & Clark, 1991). A key factor in the success of the Open University is governmental funding. Further, the Open University is not a distance education

unit within a traditional institution, thus it is not in "competition" with other departments and interests for resources within the same institution. Keegan (1986) added another element to Open University's success: Open University addressed the issue of "avoiding avoidable drop-out" (p. 106). They did this by emphasizing student support in the distance education process. Distance education is to be more than a "materials production process" (Keegan, 1986, p. 106), it is to have a human element of contact with people.

In the 1970s distance education began to expand as distance teaching universities were founded in about 20 different countries (Garrison, 1989). The University of Wisconsin, Empire State College of New York, and Nova University in Florida all established varying degrees and types of participation in distance education in the United States. Northern Virginia Community College's Extended Learning Institute (ELI) offered home-study courses with an enrollment of 6,000 students in 1989 (Hedges, 1990).

On August 29, 1981, the Public Broadcasting System's (PBS) Adult Learning Service aired its first college-credit course on television. In the following ten years nearly two million students earned credit toward undergraduate degrees from the PBS telecourses (Public Broadcasting System's Adult

Learning Service..., 1991).

A search of the Education Research and Information Center (ERIC) in August 1992 produced the information in Table 2. The first year an entry was recorded in ERIC was 1975, when there were two entries. During 1990, the last full year recorded, there were 164 entries under distance education. This search indicates that there is an increasing interest in distance education.

The concept and implementation of distance education seems to have been met with greater acceptance internationally than in the United States. Several countries have established distance education universities. A list of these universities and the dates of their incorporation are contained in Table 3.

### **Typology of Institutions**

Typologies serve as devices for analyzing and comparing institutions and organizations (Mark, 1990). A typology of distance education institutions provides an appropriate means of generalizing to other colleges and institutions within these types.

Given it's developmental history, it is not surprising that a number of organizational structures have developed within distance education. Keegan (1986) provided a

Table 2

Summary of ERIC Entries for Distance Education

<u>Years</u>	<u>Number of ERIC Entries</u>
1966-1974 (9 years)	0
1975-1983 (9 years)	233
1984-1992 (June)	<u>1,663</u>
	Total 1,896
1966-1981 (16 years)	33
1982-1992 (10 years)	1,863



Table 3

Distance Teaching Universities with Dates of Incorporation

<u>University</u>	<u>Date of Incorporation</u>
University of South Africa (Holmberg, 1986).	1946
International Correspondence Institute (Walker, 1992).	1967
Open University, United Kingdom (Rumble & Keegan, 1982).	1969
Athabasca University, Edmonton, Alberta Canada (Rumble & Keegan, 1982).	1972
Universidad Nacional de Educacion a Distancia, Madrid, Spain (Rumble & Keegan, 1982).	1972
Free University of Iran, Tehran, Iran (Rumble & Keegan, 1982).	1973
FernUniversitat, Hagen, Federal Republic of German (Rumble & Keegan, 1982; Holmberg, 1986).	1974
Everyman's University, Tel-Aviv, Israel (Rumble & Keegan, 1982).	1974
Allama Iqbal Open University, Islamabad, Pakistan (Rumble & Keegan, 1982).	1974
Universidad Nacional Abierta, Caracas, Venezuela (Rumble & Keegan, 1982).	1977
Universidad Estatal a Distancia, San Jose, Costa Rica (Rumble & Keegan, 1982).	1977

Continued next page

Sukhothai Thammathirat Open University Bangkok, Thailand (Rumble & Keegan, 1982).	1978
Central Broadcasting and Television University, Beijing, China (Rumble & Keegan, 1982).	1978
Sri Lanka Open University, Nawala, Sri Lanka (Rumble & Keegan, 1982).	1981
Open University, Heerlen, Netherlands (Rumble & Keegan, 1982).	1981
The Open Education Faculty, Anadolu University, Eskisehir, Turkey (Demiray, 1990).	1982
Vietnamese People's Open University, SR Vietnam (Arger, 1990b).	1988
Charles Stuart University, New South Wales, Australia (a merger of Riverina-Urray Institute of Higher Education and Mitchell College of Advanced Education) (Meacham, 1990).	1990

typology of distance education institutions, which is useful in classifying the various organizational structures. His typology has five types. He begins by separating distance teaching institutions into autonomous and mixed institutions:

Autonomous institutions are those totally committed to distance education. They have no resident students. Autonomous institutions are further subdivided into two types. The first type of autonomous institution can be described as public or private correspondence schools and colleges. The second type of autonomous institution can be called distance teaching universities or open universities. In essence, the second type of institutions have the "intention of supporting the distance learner by as rich a provision of support services as possible" (Keegan, 1986, p. 140).

Mixed institutions are those distance deliverers found within conventional educational institutions. They have both a distance component and a residential component (Keegan, 1986). Three of Keegan's (1986) types are mixed institutions.

Type 3 institutions are seen as independent study divisions of conventional colleges and universities (Keegan, 1986).

Type 4 institutions use a consultation model and are

found in the [former] socialist republics of Central and Eastern Europe. Interestingly, correspondence does not play a major role (Keegan, 1986). Keegan (1986) explained the consultation model as:

... learning materials for use throughout the nation are developed by course teams of professors.... The materials are distributed to the institutions which are going to enrol [sic] and teach students in that particular discipline. ... on enrolment [sic] students are allocated both to the institution from which they will get their degree (which may be far away) and to a consultation centre at an institution near to their home and work. (p. 151)

Type 5 institutions are called the Australian integrated mode. While existing within a conventional college or university, this type is distinct in that lecturers are given a dual mandate and allocated groups of both internal and external students in equal numbers (Keegan, 1986).

Verduin and Clark (1991) provided a slightly different typology, which incorporates added aspects of the distance delivery system. They included six types of institutions in their typology.

Type I institutions are postsecondary educational institutions offering college degrees to students whom they have not directly taught. There are several Type I institutions and organizations in the United States that offer degrees through combinations of comprehensive course or proficiency examinations; credit for equivalent academic work and experiential learning; and portfolio evaluations of prior learning, life, and work experiences. (p. 35)

Examples of Type I institutions include Regents College, which is part of the University of the State of New York (USNY); Thomas A. Edison College in New Jersey; Defense Activity for Non-Traditional Educational Support (DANTES), which the United States armed forces provides; and Empire State College, which is part of the State University of New York (Verduin & Clark, 1991).

Type II institutions are postsecondary education institutions offering degrees to students whom they have already taught. Degree requirements can be met through a combination of credit for prior learning, life and work experiences, credit by examination, distance education, and experiential learning. (Verduin & Clark, 1991, p. 44)

Wilson (1991) amplified Verduin and Clark by stating,

"course credit may be earned through the same means as Type I institutions; however, an additional aspect is the development of external degree programs in which over half of the academic work is completed away from the traditional on-campus program" (p. 21). Examples of Type II institutions include Stephens College Without Walls Program (SCWW) and Nova University in Fort Lauderdale, Florida (Verduin & Clark, 1991).

Type III institutions are conventional universities that offer distance education through extension, independent study, or continuing education units. Most academic distance education provided in the United States falls into this category. (Verduin & Clark, 1991, p. 47)

Examples of Type III institutions include Department of Independent Learning, Pennsylvania State University; Brigham Young University; Indiana University; Ohio University; University of Nebraska; University of Wisconsin; California State University; Purdue University; University of Florida; Texas Tech University; University of Texas, Austin; The University of Minnesota; and New York Institute of Technology (Verduin & Clark, 1991). The distance education enrollments at the top five Type III institutions in 1989, in order of size, were: Indiana University, 10,890; Brigham Young University, 10,508; Pennsylvania State University,

7,832; University of Minnesota, 7,696; and Ohio University, 6,223; for a total of 37,149 students (Verduin & Clark, 1991).

Type IV institutions involve consortia of education-related institutions formed to provide distance courses in common or over a wide geographic area. A consortium can be defined as a formal organization of two or more member institutions, administered by a director, with tangible evidence of member support. Since educational programming is so expensive, whether it is purchased or produced, educational institutions form consortia to share the costs and the risks of failure. Consortia members grant the same credit for participation, bringing a degree of consistency to their distance education. (Verduin & Clark, 1991, p. 53)

Examples of Type IV institutions include the University of Mid-America (UMA), which was dissolved due to lack of funding in 1983; the National Technological University, headquartered at Colorado State University; the Electronic University; and Regents College and Empire State College, which grant degrees through the Electronic University (Verduin & Clark, 1991). Additional examples identified by Wilson (1991) include the Emergency Education Network (EENET), sponsored by the Federal Government and the LearnAlaska Network.

LearnAlaska's audio conferencing handles more instructional conferences per month than any other similar facility in the world. The system has 320 audio conferencing sites and can link up to 80 sites together in a conference call. (Wilson, 1991, p. 24)

Type V institutions are autonomous institutions established specifically for the teaching of distance students. Type V schools might be called distance teaching institutions since [sic] they include schools at all levels--elementary, secondary, vocational/technical, and college. Distance teaching universities have been opened around the globe in nations where the educational infrastructure is not well developed or where access to higher education is highly restricted. (Verduin & Clark, 1991, p. 55)

"Most of these postsecondary institutions have been modeled after the Open University in the United Kingdom (OUUK), where over 70,000 students have received their bachelor [sic] degrees since 1971" (Wilson, 1991, p. 25).

Examples of Type V institutions include Open University in the United Kingdom; Athabasca University, Alberta, Canada; Tele-Universite (T-U), Quebec, Canada (Verduin & Clark, 1991); International Correspondence Institute (ICI), Irving, Texas; and, Berean College, Springfield, Missouri. Although there is some uncertainty, the International



Correspondence Institute and Berean College are the only examples of Type V institutions in the United States.

One Type V institution seldom mentioned in the literature, probably for political reasons, is the University of South Africa (UNISA). UNISA was founded in 1947 and as of the 1991-1992 academic year had over 100,000 students enrolled throughout the world, but primarily in the southern part of the African continent (Labuschagne, 1991).

Type VI institutions involved educational media developed by recognized educational or informational organizations used without the assistance of an educational organization by informal distance learners. This is the biggest category of all, for it includes not only self-instructional materials of all kinds, including media intended for conventional education such as textbooks, but also educational uses of distance media by incidental learners and indeed use of all media that might be considered educational or informational when used by someone engaged in incidental or self-planned learning. (Verduin & Clark, 1991, p. 57)

A key aspect of Type VI institutions and organizations is that they do not offer any assistance with the process other than providing the media.

### **Current Status of Distance Education**

As previously stated, distance education is an avenue chosen by over four million Americans to pursue their education (Valore & Diehl, 1987; Moore, 1990; Verduin & Clark, 1991).

Recent trends in the media employed in distance education include:

- (1) an increasing tendency for the same institution to use multiple media to meet the needs of diverse students;
- (2) decreasing reliance on broadcast media in favor of recorded materials;
- (3) a greater reliance on less expensive, less complex media; and
- (4) a wider assortment of options from which to choose (broadcast television and radio, limited circuit television and radio, audio and videocassette, videotext, computers, correspondence, videodiscs, telephones, for example). (Feasley, 1983, p. 1)

Since Feasley made his observation, further developments in the options of delivery include satellite uplinks and downlinks, fiber-optic lines, and PictureTel (which allows for two-way audio and video transmission over phone lines).

### **Effectiveness**

In the purpose for this study, effectiveness of distance education was identified as an issue in need of

research. "Effectiveness is important since it is the construct that may help distance educators analyze the cross-categories of institutions and programs on an equitable basis" (Mark, 1990, p. 18). Mark (1990) also stated, "[there is a need] to begin to define and examine those variables that seemingly contribute to success and effectiveness in distance learning programs" (p. 20). Donaldson (1990) suggested that possible questions for future research on the institutional contexts, administration, and organization of distance education include "How should effectiveness be defined in distance education programs?" and "What are the forces that gave rise to successful distance education programs?" (p. 9).

When summarizing management of distance education, Murgatroyd and Woudstra (1990) stated,

... of all the areas of study in the field of distance education, the field of management appears most neglected. Analytic studies are needed, as are studies of institutional effectiveness and performance indicators, and detailed studies of the extent to which distance education systems operate effectively in terms of their strategic plans. It would also be possible to develop a generalizable set of performance

indicators for examining the effectiveness of distance education. (p. 55)

A lack of study on overall effectiveness of distance education exists. An example is the University of South Africa. Particular classes and courses have been evaluated, but the effectiveness of the institution has never been examined (Labuschagne, 1991).

### **The Delphi Technique**

**Definition.** The Delphi technique is a group process used to survey and collect the opinions of experts on a particular subject. Linstone and Turoff (1975) provided a basic definition of the Delphi technique: "Delphi may be characterized as a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem" (p. 3). It has application whenever policies, plans, or ideas have to be based on informed judgement (Helmer, 1966).

Delphi has been used to gain a consensus regarding future trends and projections using a systematic process of information gathering (Helmer, 1966; Linstone & Turoff, 1975; Barnes, 1987). This technique is useful where the opinions and judgements of experts and practitioners are necessary. It is especially appropriate when it is not

possible to convene experts in one meeting. Skutsch and Hall (1973) identified the Delphi technique as a useful method for gaining judgements on complex matters on which precise information is not available.

**History.** The technique was named after the ancient Greek oracle at Delphi from which prophecies were given (Koontz & O'Donnell, 1976). An oracle refers to a statement from someone of unquestioned wisdom and knowledge or of infallible authority (Funk & Wagnells, 1966).

The Delphi technique was developed by Olaf Helmer and his associates at the Rand Corporation in the early 1950s when they were working on defense research (Linstone & Turoff, 1975; Rieger, 1986; Spencer-Cooke, 1989). Rieger (1986) described Delphi's development in five stages: (1) secrecy and obscurity, (2) novelty, (3) popularity, (4) scrutiny, and (5) continuity.

The first stage was secrecy, during which the Delphi technique was classified by the military. This stage lasted from the early 1950s to the early 1960s, when it was declassified.

The second stage, novelty, lasted from the mid-1960s to the late 1960s. During this stage the technique was used primarily by corporate planners as a forecasting tool for industry and human services.

The third stage, popularity, lasted from the late 1960s

to the mid-1970s. During this time 389 articles, papers, and reports appeared on the topic (Linstone & Turoff, 1975). Rieger (1986) reported that between the years of 1970 and 1974, 61 dissertations used the Delphi technique.

The fourth stage, scrutiny, began in 1975 with Sackman's (Rieger, 1986) unexpected attack on the Delphi technique itself. The attack was not unchallenged. The "first thrust" of Sackman's criticism "was that the technique did not measure up to the psychometric standards of the American Psychological Association.... Sackman's reasoning on this point was effectively challenged and refuted by Goldschmidt" (Rieger, 1986, p. 196). Goldschmidt (1975) responded to Sackman's criticism in an article entitled, "Scientific Inquiry or Political Critique? Remarks on Delphi Assessment, Expert Opinion, Forecasting, and Group Process by H. Sackman." Rieger (1986) stated, "Members of the research community thus gave notice that Sackman should not necessarily be accepted as the final arbiter regarding Delphi's scientific respectability" (p. 196). Sackman's second thrust criticized the indiscriminate execution of Delphi studies.

The fifth and final stage, continuity, is the Delphi's present stage of development. Rieger (1986) identified 599 dissertations using the Delphi technique between 1975 and 1984, with 441 of them between 1980 and 1984.

Types. The original intent of Delphi was as a forecasting technique, designed to predict the likelihood of future events (Helmer, 1975; Linstone & Turoff, 1975; Rieger, 1986; Spencer-Cooke, 1989; Needham, 1990). Additional names have been given to this process. Dailey (1988) described it as an exploratory Delphi. Van Dijk (1990) called it a conventional Delphi.

A policy Delphi is one which seeks to generate the strongest possible opposing viewpoints on a policy issue from an expert panel. Rather than consensus, the emphasis is on identifying differing opinions and divergent responses through a process of debate carried out through the rounds of Delphi (Linstone & Turoff, 1975; Mitroff & Turoff, 1975; Cookson, 1986; Needham, 1990). The policy Delphi is given other names also, such as focus Delphi (Dailey, 1988) and decision Delphi (Dijk van, 1990).

A normative Delphi (also called a consensus Delphi), focuses on establishing what is desirable in the form of goals and priorities. It does not focus on speculating about what is probable within a given time frame in the future (Anderson, 1975); instead it is an attempt to "... structure a set of properties which could be integrated into a normative future--properties based on the criterion of desirability rather than likelihood ..." (Sutherland, 1975,

p. 466).

Most Delphi studies in educational settings are normative and are perceived as particularly useful (Rieger, 1986; Dailey, 1988). Rieger (1986) reported 83 percent of the dissertations completed during the 1981-1984 period which used the Delphi technique were of the normative type. He went on to state, "... it seems reasonable to claim that Delphi is continuing to be a much used tool in the search for answers to normative questions, especially in education areas, but also in other fields" (Rieger, 1986, p. 198).

This study used a normative Delphi to identify criteria for distance theological education.

**Process.** The process for each type of Delphi is essentially the same; however, the purpose of a study determines the type of Delphi used. The Delphi's process is similar to the nominal group technique (NGT), except Delphi does not require the physical presence of group members (Mitchell & Larson, 1987). An interaction process still takes place between the members of the group (Delphi panel) and the researcher, with the researcher acting as a facilitator.

An important aspect of the Delphi panel is that each member is knowledgeable about the subject being investigated. Some (Barnes, 1987; Mitchell & Larson, 1987; Koontz & O'Donnell, 1976; Worthen & Sanders, 1987) have



argued that the panel members should be experts; however, Scheele (1975) illustrated a process where the opinions and judgements of people familiar with or associated with a subject were also valuable. Though not referring specifically to including non-experts, but to people familiar or associated with the topic of study, Isaac and Michael (1981) agreed with Scheele.

An unbalanced panel--members with too narrow a perspective--risks the possibility of obtaining a groupthink conclusion.

[Groupthink is] a mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members' striving for unanimity overrides their motivation to realistically appraise alternative courses of actions. (Janis, 1972, p. 9)

A classic example of groupthink is the decision rendered by the members of the ad-hoc advisory committee that planned the Bay of Pigs invasion of Cuba under President John F. Kennedy (Forsyth, 1990). Kennedy's committee contained high ranking experts, but in not wanting to challenge an "expert" opinion, alternative options were not presented or considered. The decision was either to invade or not to invade.

One advantage of the Delphi technique is the avoidance of situations that lead to groupthink. Because of the

anonymity of the panel, ideas are considered without the identity of the person presenting the idea being known to the rest of the panel. Careful thought and consideration must be given when formulating the panel.

Isaac and Michael (1981) listed a typical sequence of events in the Delphi process. It has six steps:

1. Identify the group members whose consensus opinions [sic] are sought. If the study goes beyond an intact group such that representatives must be selected, care must be taken to insure that all the various publics or positions are proportionately sampled.
2. *Questionnaire One*. Have each member generate a list of goals, concerns, or issues toward which consensus opinions are desired. Edit the results to a manageable summary of items presented in random order. Prepare the second questionnaire in an appropriate format for rating or ranking (Note: If an established or acceptable listing of such items already exists, this first step can be bypassed.).
3. *Questionnaire Two*. Have each member rate or rank the resulting items.
4. *Questionnaire Three*. Present the results of Questionnaire Two in the form of Questionnaire

Three, showing the preliminary level of group consensus to each item. Where the individual differs substantially from the group, and chooses to remain so on Questionnaire Three, the respondent should provide a brief reason or explanation.

5. *Questionnaire Four.* The results of Questionnaire Three are presented in the form of Questionnaire Four, showing the new level of group consensus for each item and repeating the member's latest rating or ranking, along with a listing by item of the major reasons members had for dissent from the prevailing group position. Each member rates or ranks each item for the third and final time, in light of the emerging pattern of group consensus and the reasons for dissent.

6. The results of Questionnaire Four are tabulated and presented as the final statement of group consensus. (p. 115)

Worthen and Sanders (1987) stated that this "iterative procedure can continue for several more rounds, but the payoff usually begins to diminish quickly after the third round" (p. 312). Brooks (1979) included an additional step prior to beginning the procedure: assess the willingness of potential panel members to participate in the study.

**Strengths.** The Delphi technique is beneficial when other methods are not adequate or appropriate for data collection. It is particularly useful when

1. The problem does not lend itself to precise analytical techniques but can benefit from subjective judgements on a collective basis.
2. The individuals needed to contribute to the examination of a broad or complex problem have no history of adequate communication and may represent diverse backgrounds with respect to experience and expertise.
3. More individuals are needed than can effectively interact in a face-to-face exchange.
4. Time and cost make frequent group meetings infeasible.
5. The efficiency of face-to-face meetings can be increased by a supplemental group communication process.
6. Disagreements among individuals are so severe or politically unpalatable that the communication process must be refereed and/or [sic] anonymity assured.
7. The heterogeneity of the participants must be preserved to assure validity of the results, i.e.,

avoidance of domination by quantity or by strength of personality ("bandwagon effect").

(Linstone & Turoff, 1975, p. 4)

In addition, the Delphi technique provides a means of obtaining information from many people without restrictions imposed by geography. It provides a means of obtaining information about particular complex phenomena often difficult to conceptualize. It focuses attention on the desired topic areas and permits a high degree of control by the survey manager (Weatherman & Swenson, 1974).

There are many additional advantages. The technique is simple to use. Advanced mathematical skills are not necessary for design, implementation, and analysis of a Delphi project. Because the Delphi provides confidentiality, many barriers to communication are overcome. Some of these barriers are a reluctance to state unpopular views, to disagree with one's associates, or to modify previously stated positions (Barnes, 1987). It helps prevent a groupthink, as earlier mentioned, particularly with one or two dominant people. A major strength of the technique is the flexible, but limited, time parameters with which individuals have to respond to the questionnaires (Brooks, 1979). This flexibility allows individuals, who may be restricted by daily schedules and geographic location, the opportunity to respond at times available to

them.

### Limitations.

Delphi is not without limitations. The consensus reached in a Delphi may not be a true consensus; it may be a product of specious or manipulated consensus. A specious consensus does not contain the best judgement. Instead, it is a compromise position (Mitroff & Turoff, 1975).

Barnes (1987) has listed additional disadvantages of the technique:

1. Judgements are those of a select group of people and may not be representative;
2. Tendency to eliminate extreme positions and force a middle-of-the-road consensus;
3. More time consuming than the nominal group process;
4. Should not be viewed as a total solution;
5. Requires skill in written communication;
6. Requires adequate time and participant commitment (about 30 to 45 days to complete the entire process). (p. 63)

Linstone and Turoff (1975) listed some common reasons for Delphi failure:

1. Imposing monitor views and preconceptions of a problem upon the respondent group by overspecifying the structure of the Delphi and not

allowing for the contribution of other perspectives related to the problem.

2. Assuming that Delphi can be a surrogate for all other human communication in a given situation.
3. Poor techniques of summarizing and presenting the group response and ensuring common interpretations of the evaluation scales utilized in the exercise.
4. Ignoring and not exploring disagreements, so that discouraged dissenters drop out and an artificial consensus is generated.
5. Underestimating the demanding nature of a Delphi and the fact that the respondents should be recognized as consultants and properly compensated for their time if the Delphi is not an integral part of their job function. (p. 6)

Fortune (1992) indicated that an additional reason for Delphi failure is that the panel members may not be able to see the vision or the "big picture" in which they are involved. This problem arises when the panel members chosen are so close to the problem that they cannot see the future.

**Appropriateness.** An overriding factor in the selection of the Delphi technique is the appropriateness of the technique for a particular study. Linstone (1978) identified two circumstances where Delphi techniques are

most appropriate: (1) "the problem does not lend itself to precise analytical techniques but can benefit from subjective judgements on a collective basis" (p. 275) and (2) "individuals who need to interact cannot be brought together in a face-to-face exchange because of time or cost constraints" (p. 275). The appropriate use of the Delphi technique would address the criticism concerning questionable application of the technique Sackman (1974) identified in his article.

Panel. A key issue to the Delphi process is the selection of the panel. The information obtained by the Delphi study is only as good as the experts who participate on the panel. Therefore, the composition of the panel relates to the validity of the results of the research (Spencer-Cooke, 1989). It is the panel's opinions and judgements that are elicited and analyzed. Therefore, considerable thought must go into the selection of the panel.



## Chapter 3

### Methodology

The purpose of this study was to identify criteria for delivery of distance theological education programs that lead to baccalaureate or graduate degrees. The procedures for collecting and analyzing the data are described in this chapter.

#### Identification and Selection of Panel Members

A key step in the Delphi process is the identification and selection of the panel. It is the panel's opinions and judgements that determine the outcomes of the study. In a study of theological education through distance education, some criteria for identifying panel members can be derived from the topic itself. The first criterion is the field of education. This field is further broken down along two dimensions: (1) theological and secular education and (2) distance and residential (traditional or face-to-face) education. Therefore, four groups are readily identifiable: denominational educators, denominational distance educators, non-denominational educators, and non-denominational distance educators. Because the process of identifying criteria for effectiveness in distance theological education is normative, the stakeholders in the field of distance theological education must be considered. The four groups selected were representative of the stakeholders in distance

theological education.

The panel was comprised of six groups of individuals. The first group was Assemblies of God college administrators. This group had twelve individuals representing nine of the twelve national Assemblies of God endorsed colleges and seminaries, one seminary outside the United States, and the national higher education office. The second group was comprised of thirteen distance education educators in the Assemblies of God. This group was comprised of individuals involved in distance education within Assemblies of God institutions of higher education. The group included representation from educators within and outside the United States. The third group consisted of three district representatives within the Assemblies of God. There are 47 districts within the United States. Twenty-six districts were contacted to have representatives serve on the panel. Their inclusion was sought because district superintendents serve on the governing boards of the Assemblies of God colleges in their regions. This group had the lowest participation rate of those contacted. The fourth group was thirty-two non-Assemblies of God distance education representatives. The individuals who formed this group were identified through books and journal articles [print based and electronic] on distance education. The fifth group was comprised of ten representatives from

accreditation agencies. These bodies included all the regional and two specialized accrediting agency within the United States and an accrediting agency outside the United States. The sixth group consisted of five representatives from adult and continuing education. The individuals in this group were identified from books and journal articles.

### **Pilot Studies**

Two pilot studies were conducted to clarify the wording of the questions in the first round of the study. In the first pilot study, comprised of three open-ended questions, the panel was asked: (1) From the perspective of your current position and looking toward the year 2000, make a list of what you believe should be the characteristics of an effective distance education program leading to two-year associate, four-year bachelor, and graduate degrees. (2) From the perspective of your current position and looking toward the year 2000, make a list of how you think distance education should be delivered in two-year associate, four-year bachelor, and graduate degree programs. (3) From the perspective of your current position and looking toward the year 2000, make a list of the ways in which distance education should be used to help church workers achieve two-year associate, four-year bachelor, and graduate degrees. The response rate to this pilot study was 50 percent; three of the six people contacted to serve on the panel responded.

The purpose of the pilot study was to identify weak or poorly phrased questions. The results of this pilot study indicated that question three was an unclear question. Question three dealt with helping church workers achieve degrees. Besides dealing specifically with a select group of students, church workers, this question did not provide sufficiently different information to warrant retaining it. As one respondent indicated, church workers are not necessarily a unique group of students. Therefore, question three was dropped for the full Delphi study. Appendix B contains a report of the findings for pilot study one.

A second pilot study was conducted based on the responses to the first pilot study. The second pilot study was submitted to nine individuals. Seven returned the questionnaire for a response rate of 77.7 percent. The purpose of the second pilot study was to further identify weak or poorly phrased questions and refine them before beginning the full study. The results of the second pilot study led to the wording of the five open-ended questions which comprised the first round of the full study. The findings of the second pilot study are contained in Appendix C.

### **Delphi Questions**

The methodology of the study was a three-round Delphi survey with responses focused on five questions related to

distance education. The five questions was presented to panel members in the following form:

Question 1:

What guidelines would you recommend to policy makers for delivering a distance theological education program leading to baccalaureate or graduate degrees? Please make a list of your recommendations.

Question 2:

What guidelines would you recommend to policy makers for screening and selecting students for distance theological education programs leading to baccalaureate or graduate degrees? Please make a list of your recommendations.

Question 3:

What support do you feel should be provided by an institution for its students in a distance theological education program leading to baccalaureate or graduate degrees? Please make a list of your recommendations.

Question 4:

What criteria would you recommend to policy makers for evaluating distance theological education programs leading to baccalaureate or graduate degrees? Please make a list of your recommendations.

Question 5:

What guidelines would you recommend to policy makers regarding ethical considerations in offering distance theological education programs leading to baccalaureate or graduate degrees? Please make a list of your recommendations.

**Research Steps**

The procedure for conducting the Delphi study included eighteen steps:

1. Identify panel members.
2. Complete a pilot study.
3. Refine the Delphi questions based on the pilot study.
4. Secure commitments from the panel members to serve.
5. Mail Delphi I to each panel member with an instruction sheet.
6. Send a follow-up postcard to each panel member seven days after the Delphi I instrument was mailed.
7. Phone nonrespondent panel members two days after Delphi I return-date deadline.
8. Analyze the responses to Delphi I; compile and create the Delphi II instrument.

9. Mail Delphi II to each panel member with an instruction sheet.
10. Send a follow-up postcard to each panel member seven days after the Delphi II instrument was mailed.
11. Phone nonrespondent panel members two days after Delphi II return-date deadline.
12. Analyze the responses to Delphi II; compile and create the Delphi III instrument.
13. Mail Delphi III to each panel member with an instruction sheet.
14. Send a follow-up postcard to each panel member seven days after the Delphi II instrument was mailed.
15. Phone nonrespondent panel members two days after Delphi III return-date deadline.
16. Analyze the responses to Delphi III.
17. Write up the results of the study.
18. Provide each panel member with a follow-up report of the findings.

### **Data Analysis**

In most Delphi studies, the median and frequencies comprise the statistical analysis (Fortune, 1992). In several educational studies using Delphi the mean was reported, too (Anderson, 1975; Barnes, 1987; Croft, 1990).

One researcher used the mode (Miller, 1988), the most frequently reported score, and the percentage the mode represented.

Means are reported in this study. Retention of criteria from the second-round instrument to the third-round instrument, and from the third-round instrument to the final set of criteria was based on the statement being rated important by at least eighty percent of the panel members responding in that iteration.

In addition to analyzing the responses of the panel as a group, a sub-group analysis was conducted. This analysis examined the responses between denominational and non-denominational educators using the Chi-square test. A separate Chi-square analysis was conducted to examine relationships between geographic location, national or international, of the respondents and their importance ratings for all criteria.



## Chapter 4

### Findings

#### Round One

The instrument used in round one of the study, "Identification of Criteria for Delivery of Theological Education Through Distance Education: An International Delphi Study," produced the findings which led to the development of the second-round questionnaire. The first instrument was mailed to an expert panel of seventy-four people. Fifty-three (71.63 per cent) members completed and returned the first-round instrument. Five people asked to be removed from the panel. Eight people didn't respond and were removed by the researcher. And additional eight (10.80 per cent) were non-respondents in the first round; however all eight responded on the second or third rounds.

The five open-ended questions in round one produced 1,166 criteria. Table 4 contains the number of criteria each of the five questions generated. The statements were classified into eight broad categories: administration, access, curriculum, faculty, feedback, support, technology, and ethical issues. The categorized statements were

Table 4

**Number of Criteria Generated by Instrument One**

<u>Question</u>	<u>Number</u>
What guidelines would you recommend to policy makers for delivering a distance theological education program leading to baccalaureate or graduate degrees? Please make a list of your recommendations.	329
What guidelines would you recommend to policy makers for screening and selecting students for distance theological education programs leading to baccalaureate or graduate degrees? Please make a list of your recommendations.	190
What support do you feel should be provided by an institution for its students in a distance theological education program leading to baccalaureate or graduate degrees? Please make a list of your recommendations.	248
What criteria would you recommend to policy makers for evaluating distance theological education programs leading to baccalaureate or graduate degrees? Please make a list of your recommendations.	228
What guidelines would you recommend to policy makers regarding ethical considerations in offering distance theological education programs leading to baccalaureate or graduate degrees? Please make a list of your recommendations.	171

combined to form the second-round questionnaire, which contained 182 criteria. The instrument for round one is in Appendix D. An illustration on how the criteria were categorized to form the second-round instrument is in Appendix E.

### **Round Two**

The second-round instrument of one-hundred and eighty-two criteria was mailed to the 61 remaining members of the expert panel, including the eight non-respondents in the first round. Fifty-six (91.80 percent) members completed and returned the second-round instrument. Mailing to the non-respondents in the first round resulted in an increase of three responses from those responding in the first round. No further members asked to be removed from the panel, so the panel size remained at sixty-one.

The mean was calculated for each criterion. For inclusion in the third round, a criterion had to be viewed as important or very important by at least 80 percent of the panel members responding. This cut-off point resulted in 72 statements (39.55 percent) being dropped. Six of the statements dropped were related to the location--national or international--of the panelists. For the statements dropped, the international panelists tended to rate them as higher importance. The six criteria and their associated chi-square values are reported in Table five. Six

Table 5

**Relationships Between Geographical Location and Criteria Dropped as a Result of Round-Two Data and Group Membership and Criteria Dropped as a Result of Round-Two Data**

<u>Location:</u>		<u>Chi-square</u>
(Student Selection) Student selection procedures require letters of recommendation from clergy, a friend, and former teachers.	The curriculum emphasizes a cross-cultural awareness as part of each course.	6.79 df = 1
(Curriculum) The curriculum contains a leveled program with cut-off points and certification at each level (e.g., the first two years (32 semester credits) of study should qualify for an AA even if a BA is not earned.	(Ethical Issues) The administration does not favor any specific dogmas in interdenominational courses.	13.87 df = 1
The content of the curriculum is self-contained, allowing the student to proceed without other assistance.		8.31 df = 3
(Student Support) Student support is provided by assisting in job placement for graduates.		6.79 df = 1
Student support is provided by providing a traveling library package to each student, which is returned when a course is completed.		8.86 df = 3
(Ethical Issues) The Administration omits only students with reasonable chances of profiting from the program.		12.47 df = 3
<u>Group Membership:</u>		11.02 df = 4
(Student Selection) Student selection procedures require students to be over 21 years old.		12.89 df = 4
Student selection procedures include open admissions for high school (or GED) graduates.		11.02 df = 4
(Access) The administration requires each student to be partly responsible financially.		12.82 df = 4
(Curriculum) The curriculum is structured in "chunks" which students can study for 1-2 hours.		10.31 df = 4

<u>Prob.</u>	.01	.03
.01	.03	.01
	.01	.01
.00		.01
.04	.01	.04

of the statements dropped were related to the group membership of the panelists. Panelists who were part of the accreditation group contributed most to the relationship of group membership to importance rating for three of the six criteria. Table five also reports the six criteria and the associated chi-square values. The remaining 110 (60.45 percent) statements were included in the third round instrument. Table six reports the mean for each criterion statement in round two. The mean rating the statements received on the third round instrument is also reported. A single asterisk (\*) indicates the statement received a 100 percent consensus rating. Eleven statements received a rating of important or very important by 100 percent of the panel. This statements are listed in Table seven. These statements indicate the role of the administration being the provision of an infrastructure and support system for the delivery of distance theological education. Six additional statements, identified as being omitted by the panel members

in round two, were included in round three for a total of 116 criterion statements. The second round instrument is contained in Appendix F.

### **Round Three**

Of the one-hundred and ten questions retained for round three, six (5.45 percent) were found to be related to the location, national or international, of the respondent using

Table 6

**Mean Importance Scores for Criteria in Rounds Two and Three**

Mean scores were based on a four-point scale: 1 = Very Unimportant, 2 = Unimportant, 3 = Important, 4 = Very Important.

Note: A blank in the round three column indicates that item was not retained for the third round instrument.

\* Rated as "important" or "very important" by 100% of the panel.

- Indicates the item failed to be retained in the final criteria.

**ADMINISTRATION**

Mission:

**The administration has...**

included the distance education program in theology in the institution's mission.

identified a need for the distance education program.

Outside Authorization or Approval:

**The administration has...**

obtained the appropriate approvals from relevant governmental agencies

obtained and maintained recognized accreditation.

Commitment

**The administration has...**

enlisted the commitment of the governing board.

enlisted the commitment of the faculty for the program.

established institutional control of all programs and administrative processes.

budgeted funds for the distance education program.

budgeted training funds for the

distance education program.

Budget

**The budget...**

includes funds to assure the continuation of the distance education program. for distance education is not dependent on special funding.

is sufficiently flexible to meet fluctuation in delivery costs.

is sufficiently flexible to meet fluctuations in revenues.

Market for the Program

**The administration has...**

identified a population to be served.

conducted a study of the target population to determine the appropriate content of the program.

Program Structure

**The administration has...**

conducted a study of the target population to determine the appropriate delivery of the program.

used pilot sites on a small scale prior to implementing distance education

programs on a state-wide or national scale.

ensured the distance education program has an academic core not different from residential programs.

adopted a distance only program and has no competing on-campus or residential program.

avoided a denominational bias in its distance education program.

designed the program for future clergy only.

designed the program for lay people only.

designed the program for both clergy and lay people.

established that courses offered by distance education are parallel to the same courses on the college's campus.

included in the program an awareness of the role of all religions in the society in which the program operates.

followed a philosophy of coordination rather than competition with other institutions.

established a thorough theoretical base for the distance education program, which includes adult learning theory, theological education, distance education, and small group theory.

provided adequate staffing.

a means of maintaining and updating student records (e.g., address changes) and of disseminating relevant information to appropriate department.

included appropriate support services for students.

included experts in distance education, adult education, and theological education as part of the consultation and delivery process.

#### Quality

##### **The administration has...**

adhered to recognized standards of the academic community regarding issues such as course rigor and student admissions.

established quality guidelines based on outcomes rather than process.

incorporated a regular review of instructional materials.

established procedures for screening distance learning instructors to ensure quality delivery.

utilized only faculty with preparation and expertise equal to resident faculty.

included enough residential faculty to perpetuate institutional ethos and quality.

used terminology and structures which reflect traditions established by residential colleges -- quarter/semester hours, hours required for graduation, etc.

#### Evaluation

##### **An evaluation procedure which...**

includes systematic, regular

evaluations to determine the effectiveness of the program.

incorporates outcomes comparable to residential programs.

is supported with a specific line in the budget.

determines if the program is cost effective.

incorporates feedback to program administrators.

incorporates methods consistent with the specific goals and objectives of the program.

utilizes multiple means of collecting, analyzing, and interpreting data [i.e., questionnaires, video tapes, focus groups, grades, technical statistics (e.g., minutes of downtime)].

includes indicators of outcomes: Do the graduates get meaningful jobs? Where are the graduates? How satisfied are students who complete the program?

establishes a means of ensuring fiscal responsibility.

evaluates management style periodically in measurable ways.

includes an assessment of unanticipated impacts.

provides for the development and use of a database which includes such information as component pass-rate, re-enrollment rate, average elapsed time to complete a degree, cost per student per component, employment rate in related occupations, course-related promotion (in existing employment), student satisfaction surveys, graduate satisfaction surveys, employer satisfaction surveys, acceptance of graduates into graduate-level programs, comparison with traditional students.

includes measures of the quality of learning (Do papers, exams, etc. reveal the achievement of desired learning outcomes?)

incorporates a compulsory evaluation sheet as part of the last assignment to acquire data from a broadly representative group of students.

includes the same evaluation standards as traditional programs.

includes an evaluation of faculty performance.

includes an understanding of the targeted student population profile, including their prior knowledge, prior educational experiences, and context for undertaking this program.

includes an evaluation of the library service.

#### **ACCESS**

##### **Student access is facilitated...**

through the use of delivery technology that is readily available.

with a policy of non-discrimination based on race, creed color, gender, or theological persuasion.

with an entrance placement exam, which allows advanced standing or credits for prior learning.

#### Student Selection

##### **Student selection procedures...**

require students to show evidence of motivation.

use standards for admission which "mirror" standards for traditional residential students.

require students to have the maturity necessary to handle independent study.

require students to be over 21 years old.

require students to demonstrate a high level of self-directed behavior.

require a grade point average of 3.0 (4-point scale) for admission to graduate study.



<p>give consideration to special needs of students.</p>	<p>provides a complete statement of financial requirements and available aid to each student.</p>	<p>semester credits -- of study should qualify for an AA even if a BA is not earned).</p>
<p>include open admissions for high school (or GED) graduates.</p>	<p>assists with phone costs.</p>	<p>provides rapid turn-around of completed lessons.</p>
<p>include open admissions for those over 25 years old.</p>	<p>provides charge-card privileges for students to pay fees.</p>	<p>provides for interaction with faculty and fellow students.</p>
<p>for non-high-school graduates require satisfactory completion of a specific number of hours applicable to the degree prior to regular admission.</p>	<p><u>Technology Level</u> <b>The technology level...</b></p>	<p>requires that "lower-level" or preliminary studies be completed before upper-level studies.</p>
<p>require letters of recommendation from clergy, a friend, and former teachers.</p>	<p>provides flexibility for reception by the student (e.g., personal computer technology for individual students, satellite technology for an interactive classroom, and mail for students without access to higher technology options).</p>	<p><u>Materials</u> <b>The content of the curriculum...</b></p>
<p>if English is the medium of study, require a score on an exam designed to test English ability for students whose first language is not English.</p>	<p>includes an awareness that some countries still may not have the means to produce or procure the technology needed for some types of delivery.</p>	<p>is self-contained, allowing the student to proceed without other assistance.</p>
<p>require the equivalent of an undergraduate degree in Bible or theology for admission to a graduate theological program.</p>	<p>provides a menu of delivery systems from which a student can select according to availability.</p>	<p>includes a writer's manual.</p>
<p>require evidence of leadership potential.</p>	<p><b>CURRICULUM</b></p>	<p>includes a unit outline.</p>
<p>require the applicant to articulate a desire for acquiring theological education through a non-traditional delivery mode.</p>	<p><u>Structure</u> <b>The curriculum...</b></p>	<p>includes a study guide.</p>
<p>require students to have family or collegial support for their educational endeavor.</p>	<p>content is determined before the appropriate mode(s) of delivery is established.</p>	<p>includes one or more textbooks.</p>
<p>include the likelihood that the student will find a place of ministry after completing the program.</p>	<p>requires student to contact professors.</p>	<p>includes a set of readings.</p>
<p><u>Cost</u> <b>The administration...</b></p>	<p>is structured in "chunks" which students can study for 1-2 hours.</p>	<p>includes audio or video supplements to the course material.</p>
<p>plans the course development, medium of instruction, and method of delivery in conjunction with the economic realities of the student's region.</p>	<p>includes performance activities (requires students to do something).</p>	<p><u>Development</u> <b>The curriculum...</b></p>
<p>ensures that the program is affordable to both students and program developers.</p>	<p>is comparable to traditional classroom study in course objectives and information.</p>	<p>is realistic in the time required of faculty to prepare materials and presentations.</p>
<p>requires each student to be partly responsible financially.</p>	<p>mandates deadlines for submitting assignments.</p>	<p>contains clear statements of objectives.</p>
	<p>includes "tugger" events to prod the student to complete assignments.</p>	<p>incorporates a pilot test to assist in refining the materials.</p>
	<p>contains a leveled program with cut-off points and certification at each level (e.g., the first two years -- 32</p>	<p>incorporates methods and materials to accommodate dominant student learning styles.</p>
		<p>includes training for students and teachers in learning styles, self-directed learning, and adult education.</p>
		<p>incorporates an understanding of students' cultural differences and needs.</p>
		<p>emphasizes a cross-cultural</p>

awareness as part of each course.

incorporates practicums and internships.

includes methods to enhance spiritual development.

#### Evaluation/Grading

#### **The evaluation and grading procedures...**

ensure that all exams are administered by a proctor.

utilize essay as well as objective-type exams.

include clear criteria for the evaluation of student achievement.

include methods to protect the integrity of evaluation materials (e.g., more than one form of final exams and control numbers on exams).

include a competency or performance-based evaluation in the final course assessment.

include, where applicable, mentor evaluation of student performance.

#### **FACULTY**

##### **There is...**

competent faculty able to provide instruction in the distance education mode.

an established load limit for professors participating in a distance education program.

a training program in the skills required to teach over the selected medium.

a local instructor who has some knowledge of subject materials to be covered.

recognition for faculty who teach in such a program; e.g., promotion or tenure.

#### **FEEDBACK**

##### **Feedback for student questions and**

##### **assignments is...**

immediate as well as reflective.

full, pleasant, and empathic.

available from a qualified "live professor."

rapid (turn-around of completed lessons).

#### **SUPPORT**

##### **Student support is provided by...**

administering a diagnostic examination for academic counseling.

assisting with forming geographical or electronic study groups.

identifying individuals with cohorts (as a means of ensuring persistence).

assuring that information services (libraries and databases) are available to students.

networking students and mandating interaction among those involved in the program.

providing support services at least 18 hours a day.

assuring that a student is connected with a ministry.  
connecting the student with a mentor.

ensuring the student has open access to a school representative for advice and counsel.

assisting in job placement for graduates.

giving students access to international information resources in theology through computer networks (e.g., Internet).

the publication of a newsletter.

giving financial rewards and awards to students who excel (e.g., dean's list, scholarships, etc...).

identification with on-campus

student body (e.g., yearbook pictures, catalogs).

provision of a toll-free (800) phone number for questions and counsel.

providing of on-line library access.

providing opportunities for social interaction with peers and faculty.

providing a traveling library package to each student, which is returned when a course is completed.

providing the same assistance to distance and residential students.

following-up students who haven't completed lessons.

requiring brief periods of on-campus residency.

#### **TECHNOLOGY**

##### **The administration has...**

provided support staff to ensure the reliability of program delivery.

selected technologies which are dependable.

assists students in gaining knowledge and skills necessary to use the delivery systems.

a backup plan for technology "failure".

matched technology to student needs and subject matter.

provided an interactive environment for two-way communication.

provided for the use of technology which allows interaction among students and between students and faculty.

determined the written word should be the basis of instruction. All other technological information devices are used only to complement the written word.

informed students of what they will receive, when and where they will receive it, and how to obtain the instruction or materials if they do not

arrive when expected.

implemented a multi-faceted delivery system, including print, video, audio, and electronic/computerized modes.

facilitated access to required technology by lending or renting computers, VCRs, or TVs if they are necessary in receiving the program.

### **ETHICAL ISSUES**

#### **The administration...**

maintains a list of schools which accept transfer credit from the distance education program.

provides a written disclaimer if transfer of credit is uncertain.

provides the student full information on what is expected and what the student will receive.

maintains security in the transmission and administration of course evaluation instruments (tests).

offers a program comparable in content and rigor to traditionally offered programs.

maintains the integrity of the copyright of learning materials and texts.

provides adequate funds to fulfill the program's mission.

has the materials on hand when they are advertised.

encourages the presentation of debatable issues fairly (the BA or MA is not an indoctrination program).

provides true general education courses, not Bible or theology disguised.

provides for the right of a student to be heard in the event of legitimate disagreement.

has a stated refund procedure for those who must withdraw or who are legitimately dissatisfied.

assures the confidentiality of technologically delivered information, especially when dealing with counseling of individuals, advisement, and other matters regulated by the right to privacy laws.

admits only students with reasonable chances of profiting from the program.

fully discloses the doctrinal orientation of the institution.

provides for a first-rate degree program.

does not favor any specific dogmas in interdenominational courses.

provides a clear description of the disadvantages and advantages of distance education prior to admission.

fosters freedom of speech, thought, and dissent.

is truthful in advertising.

never seeking "converts".

does not increase program rigor just because it is distance education.

makes a commitment to offer the entire program as advertised even if enrollment drops off.

### **ADDITIONAL CRITERIA IDENTIFIED BY PANEL MEMBERS ON THE SECOND ROUND INSTRUMENT**

Quality standards based on the goals and objectives of the distance education program rather than automatically using standards of a residential program.

Interaction should be both synchronous (at the same time in real time) and asynchronous.

Self-directed learning includes learning contracts which allow validation through options other than exams.

The student enrollment and records

system is responsive to students and involves students in imputing data or choices.

The administration provides general education courses characterized by the integration of faith and learning.

Student selection procedures require the equivalent of an undergraduate minor in Bible, theology, or religion for admission to a graduate theological program.

Round Two	2.71	
<u>Mean</u>		3.37
	3.05	
3.59		3.17
3.82*	1.70	
	2.53	3.00
	1.58	
3.58	1.46	
3.80		3.65
	2.90	
		3.38
3.50	3.04	3.09
3.76		3.05
	2.60	
3.50		3.50
3.73*	2.94	3.61*
3.50		
	3.28	
	3.55	3.09
3.48		
		3.29
3.15	3.53	
	3.67	3.17
3.23		
		2.76
3.17		
	3.32	2.92
3.69		
	3.57	
3.25		
	3.16	3.17
	3.34	
3.13		3.45
	3.44	

3.03		3.30
	3.11	2.94
2.94		2.65
3.32	2.34	
	2.22	3.57*
3.21		3.25
3.07	2.51	2.96
	1.92	2.78
	2.06	
3.58		2.58
3.49		3.80
	3.11	
2.66		3.37
	3.31	3.19
2.64	2.71	
	3.28	
2.67	2.25	2.94
3.30	2.51	3.04
2.09		3.37
		3.49
2.98		3.25
		3.30
2.59	3.23	
3.23		2.64
2.54	3.26	
2.36		
	3.01	3.46
2.68		3.75*
2.52		2.92

3.19	3.46	3.13
	3.36	2.27
3.19	3.69	
3.39		
2.96		3.67*
2.96	2.63	3.53
3.06		
	2.76	3.42*
		3.34
3.21	2.71	
		3.50
3.41	3.58	
		3.30
3.72	2.84	
	2.30	
		3.15
3.56	2.40	
	2.92	
		2.54
3.27		
	3.48	
3.11	2.74	
		3.63*
	2.74	
		2.98
	2.55	
3.78*		
	2.63	2.73
3.28		
	2.41	
3.46		
	3.07	
2.90		3.17
	3.27	
3.43		3.30
	2.68	
		3.75
	2.46	
		3.75
3.69	2.82	

3.69

3.61

3.65

3.71

3.46

3.42

3.75

3.73\*

3.73\*

3.10

3.57

3.84

3.18

3.42

3.60

3.90

3.23

3.53

3.63

Round Three  
Mean

3.60

3.66

3.88\*

3.76

3.90\*

3.81\*

3.73

3.79\*

3.88\*

3.76\*

3.74

3.86\*

3.76\*

3.74

3.17

3.02-

3.74

3.77

3.26

3.16

3.64

3.40

3.71\*

3.30

3.33

3.21

3.00

3.79\*

3.76

3.45

3.29

3.07

3.42

3.29

3.64\*

3.31



		3.41
	3.19	
3.55		
		3.88*
3.14		3.60
3.21		
3.74		
3.69		3.80
	3.05	3.63
	3.30	3.28
	3.64*	
3.29		
		3.44
		3.70
3.02-		3.09
		3.19
3.14	3.23	
	3.12	
	2.95-	3.84*
		3.86*

3.24	3.67	3.16
2.98-	3.49	
	3.74*	
3.21		
		3.83*
		3.79*
		3.41
		3.62
3.49		3.60
3.59	3.74	
		3.55
3.95*		
		3.29
3.62		
	3.77*	
		3.76*
3.93		
3.67		
3.70		
		3.00-
	2.98-	
3.67		3.12
		3.95*
3.77		3.90*



the program.

The curriculum includes performance activities (requires students to do something).

The curriculum contains clear statements of objectives.

There is a competent faculty able to provide instruction in the distance education mode.

The administration has provided support staff to ensure the reliability of program delivery.

The administration assists students in gaining knowledge and skills necessary to use the delivery system.

The administration has informed students of what they will receive, when and where they will receive it, and how to obtain the instruction or materials if they do not arrive when expected.

The administration has a stated refund procedure for those who must withdraw or who are legitimately dissatisfied.

The administration assures the confidentiality of technologically delivered information, especially when dealing with counseling of individuals, advisement, and other matters regulated by the right to privacy laws.

the chi-square test for significance. One-hundred and two (94.54 percent) of the criteria were independent of respondents' locations, national or international, using the chi-square test for significance.

The six groups--Assembly of God educational administrators, Assembly of God distance educators, Assembly of God district officials, distance educators (non-Assembly of God), accreditation representatives, and adult education

representatives--were collapsed into two groups due to a high number of expected values lower than five in the Chi-square test. The two collapsed groups were Assembly of God educators and non-Assembly of God educators. The Assembly of God educators' group was comprised of the three former groups--Assembly of God educational administrators, Assembly of God distance educators, and Assembly of God district officials. The second group--non-Assembly of God educators--was comprised of the three former groups--distance educators (non-Assembly of God), accreditation representatives, and adult educators. Eight (7.27 percent) of the one-hundred and ten statements retained were found to be related to group membership. This relationship disappeared when the third round was analyzed.

### **Round Three**

The third-round instrument of 116 criteria was mailed to the sixty-one members of the expert panel, including the non-respondents in the second round. Fifty-three (86.88 percent) members responded to the third round. Two additional members (3.28 percent) replied but did not complete the questionnaire. One was on an extended leave, and the other asked to be dropped from the panel because he did not feel he had enough expertise to respond.

The mean was calculated for each criterion. For inclusion in the final set of criteria for delivery of

distance theological education, a criterion had to be viewed important or very important by at least eighty percent of the panel members responding. Application of this cut-off point resulted in nine criteria (7.75 percent) being dropped. Five of the original criteria and four of the additional criteria identified by the panel members as being overlooked on the second-round instrument comprised the nine dropped statements. The remaining 107 criteria were those viewed by the panel as being important in the delivery of distance theological education. All of the statements were found to be independent of the respondents' location, national or international, and the respondents' group. The means for the criteria in the third-round questionnaire are reported in Table 6. One-hundred percent of the respondents in round three rated 31 statements as either important or very important.

The criteria identified by this study for delivery of theological education through distance education were divided into eight categories: ethical concerns, commitment to the distance education program, curriculum, evaluation, feedback, student support services, technological considerations, and faculty matters.

The category "ethical concerns" included eight criteria. The criteria were related to standards in two

areas: standards of conduct and standards of quality. Six were standards of conduct:

- The administration is truthful in advertising.
- The administration provides the student full information on what is expected and what the student will receive.
- The administration assures the confidentiality of technologically delivered information, especially when dealing with counseling of individuals, advisement, and other matters regulated by the right to privacy laws.
- The administration maintains security in the transmission and administration of course evaluation instruments.
- The administration provides for the right of a student to be heard in the event of legitimate disagreement.
- The administration has the materials on hand when they are advertised.

Two criteria were ethical standards of quality:

- The administration offers a program comparable in content and rigor to traditionally offered programs.
- The administration provides for a first-rate degree program.

The category "commitment" included eight criteria in three areas: commitment to the purpose of the distance education program, institutional commitment to the distance education program, and financial commitment to the distance education program. Two criteria were related to commitment to the purpose of the program:

- The administration has identified a need for the distance education program.
- The administration has identified a population to be served.

Six criteria were related to institutional commitment:

- The administration has enlisted the commitment of the governing board.
- The administration has enlisted the commitment of the faculty for the program.
- The administration has obtained and maintained recognized accreditation.

Three criteria were related to financial commitment:

- The administration has budgeted funds for the distance education program.
- The administration provides adequate funds to fulfill the program's mission.
- The budget includes funds to assure the continuation of the distance education program.

The category "curriculum" included three criteria in



two areas: curriculum areas related to students and curriculum areas related to faculty. Two criteria related to students were:

- The curriculum contains clear statements of objectives.
- The curriculum includes performance activities (requires the students to do something).

The curriculum criterion related to faculty matters was:

- The curriculum is realistic in the time required of faculty to prepare materials and presentations.

The category "evaluation" included four criteria in two areas: program evaluation and student evaluation. Three criteria were related to program evaluation:

- An evaluation procedure is used which incorporates methods consistent with the specific goals and objectives of the program.
- An evaluation procedure is used which includes systematic, regular evaluations to determine the effectiveness of the program.
- An evaluation procedure which incorporates feedback to program administrators.

The criterion related to student evaluation was:

- The evaluation and grading procedures include clear criteria for the evaluation of student achievement.

The category "student support" included three criteria: • The

- Student support is provided by ensuring the student has access to a school representative for advice and council.
- The administration has informed students of what they will receive, when and where they will receive it, and how to obtain the instruction or materials if they do not arrive when expected.

The category "technological considerations" included two criteria:

- The administration has selected technologies which are dependable.
- The administration has provided support staff to ensure the reliability of program delivery.

The category "faculty" included one criterion.

- The administration has established procedures for screening distance learning instructors to ensure quality delivery.

Finally, the category "feedback" included one criterion:

- Feedback for student questions and assignments is rapid (turn-around of completed lessons).

## Chapter 5

### Summary, Conclusions, Discussion, and Recommendations

#### Summary

Distance theological education is one means of increasing access to and containing costs of theological education. It is particularly helpful to nontraditional students who desire higher education but who cannot leave family and work commitments for residential study. For some in both developing and developed countries, distance education is the only route open to higher theological education. Distance theological education has been used increasingly during recent years. A set of criteria to assist in evaluating existing programs and guide the development of new programs has not been agreed on in the field of distance theological education. The purpose of this study was to identify criteria for delivery of distance theological education programs that lead to baccalaureate or graduate degrees.

The research methodology adopted was a three-round Delphi technique. An international panel of seventy-four members was formed with denominational educators and non-denominational educators represented. The questions used for round one were pilot tested twice. The responses generated by the five open-ended questions were used to develop the one-hundred and eight-two statements used in

round two. The panel was reduced by thirteen after the first round, bringing the panel size to sixty-one.

The second-round instrument contained one-hundred and eighty-two criteria. The instrument was mailed to the sixty-one panelists, including the non-respondents in the first round. Fifty-six (91.80 percent) of the sixty-one panelists responded to the second round. For retention and inclusion in the third round, each criterion had to be rated as important or very important by eighty percent of the respondents. Seventy-two (39.55 percent) statements were dropped after the second round. The panel identified six additional criteria to be included on the third-round instrument.

The third-round instrument was developed from the one-hundred and ten statements retained after the second round and the six statements added by the panel. Fifty-three (86.88 percent) members responded to the third round. For inclusion in the final set of criteria, each statement had to be rated as important or very important in the delivery of theological education through distance education by eighty percent of the respondents. One-hundred and seven (92.24 percent) statements were retained to form the final set of criteria; nine statements were dropped.

There were no relationships between the importance rating panelists assigned criteria and the panelists'

location, national or international. Neither were there any relationships between the importance rating panelists assigned criteria and the panelists' group membership, denominational educators or non-denominational educators.

The Delphi technique proved useful in identifying criteria for the delivery of theological distance education. Ten criteria on the second-round were rated important or very important by all of the panel members. Twenty-one criteria were rated important or very important by all panel members in the third round. This resulted in a total of thirty-one criteria receiving ratings of important or very important by all panel members.

The time involved in completing this international Delphi study was greater than originally anticipated. Many international panelist had access to fax machines for transmission and reception of material, but in some cases the cost of international transmission was prohibitively expensive. It was not unusual for responses to take six or seven weeks from the time a questionnaire was mailed. Regardless of these delays, one of the main benefits of the Delphi technique used in this study was the ability to gain input and perspective from around the world which would have been impossible had the process been limited to a group meeting in one location due to cost and scheduling.

## **Conclusions**

Three key areas identified by this study are criteria related to ethics, commitment, and curriculum. Part of the reason for this may be a stigma distance education continues to labor under which is association with "degree mills" and match-book cover schools.

Administrators of distance education programs must assure their students and the education community at large that they provide quality instruction and that they are committed to standards of quality, conduct, and treatment of students which match or exceed their counterparts in residential programs. Besides fully disclosing affiliations and truthfulness in advertising, special care must be addressed to the dependability and reliability of the delivery technology and the related instructional process. Because of the mediated aspect of student contact with administrative services as well as the instructors, procedures need to be in place to address students' problems and concerns which are not limited to curriculum. Depending on the technological level of delivery, this may include an extended "drop/add" period, provision of counselors trained in advising students at a distance and the particular challenges they face, back-up plans in case of delivery failure (including lost mail) and an allowance for the fact that students may be in a much earlier or later time zone

than the instructors and may have difficulty reaching an instructor or administrator during traditional "office hours".

The level of commitment to a distance education program is closely related to the motive for participating in the distance education endeavor. When the motive stems from the mission of the institution's purpose for being, there is an increased likelihood that the distance education program will receive the administrative, faculty, and financial commitment it requires. Before developing a distance delivery program, the program administrator must ask, "Why use distance delivery?" The answer must be based firmly in the institution's purpose as a whole.

The curriculum in distance education must be clearer in objectives and delivery than in traditional programs. Traditional face-to-face delivery has the element of non-verbal communication from an instructor to facilitate understanding of the presentation. Mediated instruction, with the possible exception of two-way audio and video delivery, lacks this element of communication in varying degrees. To aid in assuring the curriculum and instructional materials are clear, additional time should be allowed for planning and preparation of the instructional materials, both in content and quality of presentation.

An ongoing process of program evaluation and improvement will help prevent program stagnation. The evaluation procedure should not be limited to a report of pass and completion rates, but include an impact evaluation, weak areas, strong areas, and an assessment of how better to reach the objectives and goals of the program.

Students involved in distance education require support services much the same as residential students. While the area of residential life may not be relevant, the importance of connection with the program requires more effort than with a residential program. Students need to know they have access to faculty, administrators, and support staff if they need it. Included in support services are such areas as access to libraries and reference material, a sense of identification with the program through networking with other students and faculty, and the inclusion in financial assistance programs.

Technology in distance education is not simply a piece of hardware, rather it is a means of increasing access to information and education. For this reason those selecting a delivery method must consider the dependability and reliability of transmission and reception. Relevant to reception is the level of technology required by the students for the delivery used. The student clientele must be known, and the delivery method must be selected with



their reception capability in mind.

The faculty in a distance education program must be selected or trained with a knowledge of their ability to provide instruction using a particular delivery medium. A medium which is print based in delivery requires instructors who have excellent written communication skills. A medium which incorporates audio transmission requires an instructor who has excellent verbal skills. And, a medium which incorporates both video and audio transmission requires both excellent verbal skills and good camera presence. The reason for the camera presence is the students' attention is narrowly focused on a smaller portion of the instructor, whereas in a traditional face-to-face classroom a student is not required to focus on a two-foot by two-foot presentation of the instructor.

The feedback time for student lessons is closely associated with technology. When students have access to a high level of technology, the feedback time can be decreased through the use of e-mail and fax. Neither of these technologies is necessarily limited by national boundaries. When feedback for student material is dependent on a postal system, priority mail or express mail can be beneficial in decreasing the feedback time. Internationally, there are certain express services which provide quicker delivery of printed material than some postal systems. A distance

education administrator should consider the educational benefit and student support benefit of decreasing the feedback duration time with the increase in cost of delivery.

The criteria identified in this study can be viewed as standards for the delivery of distance theological education because they received unanimous consensus as being important or very important for delivery by a diverse international panel representing groups involved in delivery of distance education programs. A distance theological education program which satisfies the criteria identified in this study can reasonably be viewed as effective.

### **Discussion**

Ethical concerns are relevant to programs with both residential and distance students. But, as personal contact diminishes and instructor-student and student-student contact becomes more mediated, the criteria addressing ethical concerns become more relevant. When the geographic distance increases, especially crossing international borders, the protection for students may decrease. Thus, it becomes essential for a distance education program to have the highest ethical integrity and standards.

The area of commitment is more relevant to programs and institutions with a mix of residential and distance students than to autonomous distance education programs. This is

especially true when resources are limited or during economic retrenchment on the part of the institution. Commitment tends to be high when distance education is viewed as an avenue to alleviate part of the stress on an educational system. But, when distance education is seen only as a temporary-fix or a revenue source, commitment to the quality of the distance education program may be low, thus time and energy in developing a quality program may be reduced. Thus, the students involved in receiving instruction via this delivery system stand to lose because of the limited commitment to program development and improvement.

The criteria identified in the curriculum category appear to be related to an application of knowledge or a validation of learning rather than an accumulation of knowledge. The emphasis seems to be on applied rather than bookish learning.

As a whole the evaluation criteria appear to emphasize the necessity for the administration to be involved in the overall evaluation process. Program effectiveness is measured through an ongoing process of evaluation which includes both student and program measures.

The technology criteria emphasized dependability and reliability of a selected delivery system. Student and faculty support are necessary to facilitate the use of the

selected technology. Without this support instructors and students may have difficulties that detract from the effective use of the medium. Screening and training of the faculty involved in the distance education program are required.

The necessity for rapid feedback addresses one of the weak links in the distance education process: the time required for students to receive answers and clarification to their questions. Rapid feedback is also associated with the level of technology used to deliver the instruction. The higher the level of technology at the student's side of the delivery system, the greater the likelihood of the feedback loop being quick. Instruction using low-level technology, such as the mail system, faces a slower feedback loop (the duration of time between when a question is asked and when the answer is received) than instruction using high-level technology such as satellite uplinks and downlinks with two-way audio and video transmission. For example, in this study, the time between when material was mailed to some international panelists and reception of their response, even when they responded quickly, was four and five weeks. Therefore, the use of high-level technologies, which are available to both the program providers and the students receiving the instruction, reduces the duration of the feedback loop and leads to a more effective delivery

process.

Though this study was limited to the delivery of theological education through distance education, the findings are generalizable to other academic disciplines. There is little which is unique to theological education that prevents the criteria identified in this study from being applied to other academic disciplines.

L. Cross (personal communication, April 9, 1993) asked, "What are the differences between distance and residential programs?" With the exception of the delivery technology and the needed commitment to distance education, all of the criteria are relevant to theological programs with only residential students. When assessing the educational benefit of the distance education program at Virginia Tech, J. Muffo (personal communication, February 24, 1993) noted that one of the main benefits was that the medium caused the instructors to be better organized in their presentation of instructional material.

### **Recommendations**

The eight sets of criteria identified in this study provide a first step in the process of establishing standards for effective delivery of distant theological education. Further research can be done to ensure the criteria are conclusive. Then, the standards need to be adopted by a formal group such as a distance education

association or an accrediting agency and formally apply the standards in their accreditation process.

After standards have been set, they should be validated in regards to their utility in enhancing effective delivery. This process should include identifying programs which have incorporated the standards and comparing those programs to programs which have not incorporated the standards on measurable outcomes.

One of the successes in the delivery of distance education, according to the literature, was the emphasis the Open University in the United Kingdom placed on student support. This emphasis resulted in an increase in student retention (Keegan, 1986). The importance ratings the international panel gave the criteria in the support category produced a mixed view of this premise. Of the twenty-four criteria related to student support in the second round, seventeen (81 percent) failed to meet the 80 percent cut-off level for inclusion in the third-round questionnaire, though two statements did received a 100 percent consensus rating. Further research needs to be conducted to establish the role of student support in the effective delivery of theological education through distance education.

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Appendix A

Letter of Invitation, Response Form, and Panel Members





## PANEL MEMBERS

### Assembly of God College Administrators

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Academic Dean  
Southwestern Assemblies of God College  
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- Marshall E. Flowers, Jr., Ph.D.  
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- Dr. Edgar R. Lee  
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- David J. Moore  
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American Indian Bible College  
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- Wayne Cagle  
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- Robert A. Love  
Director of Educational Services  
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BELGIUM
- Joseph Nicholson  
Academic Dean  
Berean College  
Springfield, Missouri
- George R. Stotts  
Director of Graduate Studies  
ICI  
Irving, Texas
- Charles D. Wilson  
Regional Director for Central Africa - ICI  
Jos, Nigeria

Assembly of God District Superintendents & Representatives

- Rob Burkhart, Ph.D.  
District Christian Education Director  
Assemblies of God, Michigan District  
Dearborn, Michigan

Non-Assembly of God Distance Education Representatives

- Benjamin S. Blanchard  
Assistant Dean of Engineering for Public Service  
College of Engineering  
Virginia Tech  
Blacksburg, Virginia
- Professor J. J. Burden  
Dean, Faculty of Theology  
UNISA  
Pretoria  
REPUBLIC OF SOUTH AFRICA
- Michael Connet  
Manager-Distance Learning  
Kansas University-Medical Center  
Kansas City, Kansas

- Dr. John Daniel  
Vice-Chancellor  
The Open University  
Milton Keynes  
UNITED KINGDOM
- Dr. Ugur Demiray, Associate Professor  
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Director (Academic)  
National Open School  
Delhi  
INDIA
- Bob Spencer  
Director, Centre for Distance Education  
Athabasca University  
Athabasca, Alberta  
CANADA
- Ray L. Steele  
Chairman of The Board  
United States Distance Learning Association  
Director, CICS  
Ball State University  
Muncie, Indiana
- John R. Verduin, Jr.  
Professor  
Department of Educational Administration & Higher  
Education

Southern Illinois University - Carbondale  
Carbondale, Illinois  
Accreditation Representatives

- Randall Bell  
Executive Director  
American Association of Bible Colleges
- Charles M. Cook  
Director of Commission  
New England Association of Schools and Colleges - CIHE  
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National Home Study Council  
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- Joseph A. Malik  
Executive Director  
Commission on Colleges  
Northwest Association of Schools and Colleges  
Seattle, Washington
- Dr. Kenneth L. Perrin  
President  
The Council on Postsecondary Accreditation  
Washington, D.C.
- Howard L. Simmons, Ph.D.  
Executive Director  
Commission on Higher Education  
Middle States Association of Colleges and Schools  
Philadelphia, Pennsylvania
- Bruce Chaloux  
(Chair of Southern Association of Colleges and  
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Director  
Northern Virginia Graduate Center  
Falls Church, Virginia

- Dr. David Woodhouse  
Deputy Executive Director  
HKCAA (Hong Kong Council for Academic Accreditation)  
Central  
HONG KONG

Adult and Continuing Education Representatives

- Hans Andrews  
Dean of Instruction  
Illinois Valley Community College  
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- Ralph G. Brockett  
Department of Technological and Adult Education  
University of Tennessee  
Knoxville, Tennessee
- Dr. David Carl  
Associate Provost & Dean of Graduate Studies  
Office of Dean of Graduate Studies  
Cameron University  
Lawton, Oklahoma
- Rae Rohfeld  
Associate Professor  
School of Education  
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Syracuse University  
Syracuse, New York

Appendix B  
Pilot Study One



## INSTRUCTIONS

*Please note how long it takes to complete the each question. This information will be useful at the study develops. Thank You.*

1. Please put your name at the top of each page. Should the pages become separated, this will allow them to be put together again.
2. Please respond to the following three questions, marked A, B, and C, from your position and perspective.
3. Please answer each question in the form of a list, either short phrase, or complete sentence.
4. Please focus your answers on distance HIGHER EDUCATION, programs that lead to degrees (2 year associate, 4 year bachelors, and graduate degrees).
5. Please complete Instrument and Process Feedback form.
6. Please complete the Panelist Information Form.
7. Please return the Delphi questions, Instrument and Process Feedback form, and Panelist Information Form, in the enclosed stamped envelope. A prompt response will be of great benefit to the study.

**Thank you for being a valuable part of this study.**

A

QUESTION #1

Name

Time Started: \_\_\_\_\_

Time Ended:

**From the perspective of your current position and looking toward the year 2000, make a list of what you believe should be the characteristics of an effective distance education program leading to two-year associate, four-year bachelor, and graduate degrees.**



**B**

QUESTION #2

Name

Time Started: \_\_\_\_\_

Time Ended:

**From the perspective of your current position and looking toward the year 2000, make a list of how you think distance education should be delivered in two-year associate, four-year bachelor, and graduate degree programs.**

C

QUESTION #3

Name

Time Started: \_\_\_\_\_ Time Ended:

**From the perspective of your current position and looking toward the year 2000, make a list of the ways in which distance education should be used to help church workers achieve two-year associate, four-year bachelor, and graduate degrees.**

# INSTRUMENT AND PROCESS FEEDBACK

Name

Did you have any trouble responding to the questions?

Question #1:  Yes  No. If Yes, explain:

Question #2:  Yes  No. If Yes, explain:

Question #3:  Yes  No. If Yes, explain:

Were the questions clear? If not, do you have any suggestions to clarify them?

Question #1:  Yes  No. Suggestions:

Question #2:  Yes  No. Suggestions:

Question #3:  Yes  No. Suggestions:

Were the questions sufficiently different; i.e., did you think of different responses for each question?

Question #1:  Yes  No. Reword:

Question #2:  Yes  No. Reword:

Question #3:  Yes  No. Reword:

# PANELIST INFORMATION FORM

NAME

ADDRESS

PHONE NUMBER

FAX NUMBER

ELECTRONIC MAIL NUMBER

POSITION

RETURN TO:

Gary L. SeEVERS, Jr.  
401 East Eggleston  
College of Education  
Virginia Tech

Blacksburg, VA 24061-0302

PILOT PANEL MEMBERS

Tom Head  
Director, Media Services  
Virginia Tech  
Blacksburg, VA 24061

John Muffo  
Director  
Program Review & Outcomes Assessment  
Blacksburg, VA 24061

Burton Pierce  
Executive Secretary  
Potomac District Council of the Assemblies of God  
Fairfax, VA 22030

## FINDINGS OF THE PILOT STUDY

### Categorized responses

#### **Question #1**

From the perspective of your current position and looking toward the year 2000, make a list of what you believe should be the characteristics of an effective distance education program leading to two-year associate, four-year bachelor, and graduate degrees.

#### ACCESS

Ease of access to courses/programs

Low Cost

Does not require high technology equipment on the student/receiving end

#### DELIVERY

Traditional teaching practices have been adapted to the needs of the students at the remote sites

Instructors in the program have been trained to teach distance education courses

#### COURSEWORK

Broad range of courses/programs available

Comprehensive and thorough content

Use of best possible texts

Remedial assistance is provided to students who need help on preparation on math skills, etc.

Written responses

Written essays

Extensive research in local libraries with  
written project papers

#### FEEDBACK/SUPPORT

Ease of access to teaching faculty when necessary; need  
not be in person

Logistical mechanisms have been implemented to  
distribute materials to the students in a timely  
manner.

Site coordinators are available to assist the students.  
Arrangements have been made for advising students by  
telephone or E-mail throughout their careers.

Assistance on homework, etc., is provided to students  
by the instructor or graduate teaching assistants on a  
regular basis.

#### RESIDENTIAL REQUIREMENT

Should involve at least one semester of residential  
study

#### STANDARDS

Standards are high so that degrees are respected when  
earned.

Sizable graduation fee to validate the degree granted.

#### **Question #2**

From the perspective of your current position and looking



toward the year 2000, make a list of how you think distance education should be delivered in two-year associate, four-year bachelor, and graduate degree programs.

#### LOW TECHNOLOGY REQUIREMENT

Mail

Specific library assignment or local research

Audio tapes

Occasional face-to-face meetings

#### MODERATE TECHNOLOGY REQUIREMENT

Occasional telephone calls with faculty

Compatible computer software to facilitate exchange of information between student and school

#### HIGH TECHNOLOGY REQUIREMENT

Satellite (one to many sites)

Video tape lectures/self-paced study with interaction on satellite between instructor and students

Two-way compressed video on land lines (one to limited number of sites)

The technological level of the country of the student dictates to a great degree how distance education programs should be delivered.

#### **Question #3**

From the perspective of your current position and looking toward the year 2000, make a list of the ways in which distance education should be used to help church workers

achieve two-year associate, four-year bachelor, and graduate degrees.

This question is unclear and does not provide a unique perspective.

1. Required student access to a theological library (seminary or university)
2. Tuition subsidy by sponsoring church organization for students

#### Summary

The response rate to this pilot study was 50 percent; three of the six people contacted to serve on the panel responded. The purpose of the pilot study was to identify weak or poorly phrased questions. The results of this pilot study indicated that question three was an unclear question. Question three dealt with helping church workers achieve degrees. Besides dealing specifically with a select group of students, church workers, this question did not provide sufficiently different information to warrant retaining it. As one respondent indicated, church workers are not necessarily a unique group of students. Therefore, question three was dropped for the full Delphi study.

The responses to question one were related to the general characteristics of effective distance education programs. The characteristics seemed to fall into five categories: access, delivery, coursework, feedback/support,

and standards. The categories of access and feedback/support received the most comments.

The responses to question two were related to the delivery medium and its related technological structure at the receiving end of the instructional delivery. The findings indicated that three levels of technological structure are identifiable. The levels are: low technological development requirement, moderate technological development requirement, and a high technological development requirement.

Both questions one and two were viewed as clear, presented no difficulty in responding, and were sufficiently different from each other according to the pilot panel. Therefore, questions one and two were retained for the full Delphi study.

Appendix C  
Pilot Study Two

September 18, 1992

Dear :

Thank you for agreeing to serve as one of the experts on a pilot study panel to identify criteria for effectiveness in the delivery of distance theological education.

Enclosed are the instructions and the five questions for the first round of the study. You will see that the questionnaire has a label with your name on it. Your responses will remain confidential, the label is for data processing purposes only. A prompt response would facilitate completion of the study. A summary report of the findings will be sent to you around the first of October.

If available, you may return the questionnaire via Fax or E-Mail. This would be helpful in reducing the response time. The Fax number to return the questionnaire to is (703) 231-7845. Should you have any questions, please contact Gary Seevers at: (703) 231-9720 or via E-Mail at (Bitnet) GSEEVERS@VTVM1. Thank you for your participation.

Sincerely,

Gary L. Seevers, Jr  
Research Associate

David J. Parks  
Associate Professor





Thank you for being a valuable part of this study!



## QUESTION #1

What guidelines would you recommend to policymakers for **permitting people to participate** in distance theological education programs leading to baccalaureate or graduate degrees?

## QUESTION #2

What guidelines would you recommend to policymakers for **delivering a program** in distance theological education leading to baccalaureate or graduate degrees?

QUESTION #3

What **support** do you feel should be provided by the institution to students in distance theological education programs leading to baccalaureate or graduate degrees?

#### QUESTION #4

Please make a list of what you believe should be the standards or indicators of quality for **outcomes** of an effective distance education program.

## QUESTION #5

What do you feel are the **ethical considerations** in offering distance theological education programs leading to baccalaureate or graduate degrees?





## Findings of Pilot Study #2

### Technology Scale

Respondent #1: Did not mark scale.

Respondent #2: Marked **4**

Respondent #3: Did not mark scale.

Respondent #4: Marked **4**

Respondent #5: Did not mark scale.

Respondent #6: Did not mark scale.

Respondent #7: Marked approx. **3.6**

Only three of the seven respondents marked the technology scale. All seven responded to the questions.



## CATEGORIZED RESPONSES

### QUESTION #1

What guidelines would you recommend to policy makers for permitting people to participate in distance theological education programs leading to baccalaureate or graduate degrees?

#### Academic Preparation for an Undergraduate Program

High school diploma

From accredited institution

Same as the guidelines at a related residential program

#### Access to Technology

Participation will be dependent upon access to equipment (in centers or home) (i.e., computer, modem).

#### Academic Preparation for a Graduate Program

Baccalaureate degree from an accredited institution

Commitment to theological education

Three years of successful work-related experience

#### Psycho-Social Preparation

Maturity

Initiative

Self-discipline

Motivation

#### Pre-admission Analysis

Development and application of a pre-admission instrument to predict a potential student's level of persistence in a distance education curriculum

Pre-admission testing of a potential student's self-management and organizational skills

Development of a learner profile to predict success and support of a learner

Probation, Trial, or Pre-requisite Course

Successful completion of a required "first course" for permanent admission into program

Need for a Non-traditional, Non-residential Program

Unable to attend an on-campus, residential program or classes

Due to: Financial reasons

Geographical distance

Resulting Benefits from Distance Education Study

Reduction in cost--more students able to participate

Continue employment

Study at own pace

Tailor-made materials for individual students

QUESTION #2

**What guidelines would you recommend to policymakers for delivering a program in distance theological education leading to baccalaureate or graduate degrees?**

Development

Policy makers must be fully aware of the pre-delivery costs for developing quality distance education instruction.

Allocation of funds for the maintenance and support of the necessary support systems

Clearly stated institutional policy that supports distance education

Well-defined policy within promotion/tenure process that rewards faculty involved in distance education activities

Clearly outlined program goals and expectations

#### Curriculum

Minimal electives available

Cohort student groups

Require that courses be designed (or re-designed with input from an instructional design specialist (team approach)

Require attendance of distance learners to a student orientation specifically designed for them

#### Scope

Distance delivery should never comprise the total scope of any program

#### Context-sensitive Teaching Styles

Policy that encourages creativity and risktaking.

Require and support faculty training in curriculum design and delivery via various communication technologies.

#### Diversification

Audio

Video

Computer software

Hard copy readings

Flexibility in selecting delivery modes; one mode not  
"mandated"

Student Access to Technology

Student required to obtain computer hook-up

Deliver in media easily accessible to participants

Electronic media (interactive video, tele-conferencing,  
audio and video capabilities, computers with modems,  
satellite capabilities)

QUESTION #3

**What support do you feel should be provided by the  
institution to students in distance theological education  
programs leading to baccalaureate or graduate degrees?**

Screening prior to acceptance

Financial aid

Basic

Same support as offered residential students

Books

Syllabi (print, electronic, audio, video)

Minimize logistical "hassles" of class registration,  
add/drop, payment of fees, etc.

Computer and other "technology" support

800 hotline

Provide opportunities for practical training

Learning Relationships

Mentor (faculty advisor)

Peers

Computer-based bulletin board service (BBS)

E-mail with faculty

Provide adequate face-to-face encounters (not  
distance delivered)

Feedback

Provide very quick turnaround on all academic work  
and inquiries submitted by enrolled students

Research facilities

Library

Mainframe access to library and research data bases

Data links

Job placement

QUESTION #4

**Please make a list of what you believe should be the  
standards or indicators of quality for outcomes in an  
effective distance education program.**

Same as campus based programs

Delivery related

Constant feedback

Curriculum related

A syllabus

Course objectives

Mastery of academic information (criterion-referenced  
tests)

Program completion

Program growth

Program recognition or acceptability

#### Faculty Involvement

Well qualified faculty

Faculty on speaking terms with the administration of distance ed. program.

#### Applied or Skills Related

Ability to discuss theological issues capably (assessed by theological discussion with a faculty committee)

Competence in counseling skills (evaluated through committee observation)

Performance indicators

Practicums

#### Professional Placement and Development

Student satisfaction

Number of students employed in theological settings after graduating from the program

Number of students who pursue a graduate degree

Placement of graduates in highly visible and respected positions with the theological community

High student achievement

Graduation rate

QUESTION #5

**What do you feel are the ethical considerations in offering distance theological education programs leading to baccalaureate or graduate degrees?**

None

Same as for those on-campus (residential program students)

No unique requirement in distance education. Distance education is just a delivery system and nothing more

An honor code for students

Multiple indicators of student achievement, including field performance and on-campus assessment

Properly trained and qualified staff

The high-tech approach can become impersonal and hence inappropriate or irrelevant

Program accredited by appropriate agency

Admissions standards are on par with residential programs

Recognized by appropriate religious institutions (a useful degree)

### SUMMARY

The second pilot study was submitted to nine individuals. Seven returned the questionnaire for a response rate of 77.7 percent.

The purpose of the second pilot study was to identify weak or poorly phrased questions. The results of the study were successful to that end.

The second pilot study was useful in illustrating the need to ask the panel members to make a list of their opinions as they were asked to do in question four. The responses became clearer starting with question four. The feedback form and personal discussion with the panelists also indicated the usefulness of requesting the responses be in the form of a list. The wording of question four could have been clearer by inserting the word "theological" between the words "distance" and "education," which would also make it consistent with the other questions.



PANELISTS

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**Appendix D**

**Round One**

Letter

Follow-up

## Instructions

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Appendix E

Categorization Process of Criteria Identified in Round One

The first step in developing the second round instrument was the collection and analysis of the panelists' responses. An example of the "raw" or uncategorized responses is:

**QUESTION #1**

The institution must undertake a detailed and introspective analysis of its current mission, objectives and programming and must determine whether it has the ability and desire to make adjustments in its operating systems to accommodate a distance learning program and whether such an activity can be assimilated into the institution's mission. In undertaking such an analysis, I would recommend the following guidelines. Prior to initiating a distance education program, the following issues should be considered:

1. Commitment of the Board, administration, and faculty to the program.
2. Availability of financial resources required to initiate and maintain a distance education program.
3. The potential interest or "market" of students for the distance education program.
4. The interest, ability, and competency of the faculty to provide instructional services in a distance education mode.
5. The availability of technology and support staff to ensure technical reliability for the distance education program.
6. Knowledge of international, federal, and state legal requirements for operating educational programs away from the main campus or point of origin; in addition, any such activity must have the "stamp of approval" of the home regional accrediting body--an institution would be wise to work closely with that body in developing a distance education program.

Be certain that the technologies are available and work PROPERLY.

Be certain that the technologies are dependable.

Assure that the students are familiar and comfortable with the delivery systems being used (eg. they must know how to use a computer & modem).

Have a backup plan for technology "failure".

Survey potential students re: knowledge of and wish to use technology for learning.

Assure that the educators have the skills to effectively use the technologies or have technical support personnel readily available.

Assure that educators believe in the capability of technology to deliver instruction and are flexible regarding the inevitable SNAFUs.

Conduct systematic and regular checks of the effectiveness of the system--a continuing formative evaluation.

Assure that information services (libraries and databases) are available to students to properly support education, especially graduate education.

Make arrangements for students to work in cohorts.

Make the distance learning technology fit the students needs and subject matter being taught -do not let the technology drive the educational effort. Keep the real goal on theology education in mind.

Prepare high quality teaching materials, irrespective of the delivery modes used.

Be realistic as to time to prepare materials and/or prepare presentations.

Do not try to overuse technologies. Determine the message first then determine appropriate mode(s) of delivery.

Establish realistic budgets.

Identify who is responsible for particular costs of e-mail, telephone calls, etc...

Access for learning/learner/individual institution for local applications.

Interactive classroom environment for two-way communication.

Concern for theological orientation of presenters, materials.

Courses offered through the non-traditional format should be parallel with the same courses on the college's campus, thus rendering a quality of equality.

Courses should be structured in such a manner to require the students to contact the professors periodically.

All exams must be administered by proctor to the students.

A load limit should be established for the professors participating in the program.

Obtain and maintain recognized accreditation.

Emphasize academic quality and credibility.

Don't choose one form of delivery to the exclusion of multiple vehicles of transmission.

Adhere to recognized standards of the academic community regarding issues such as course rigor and student admissions.

Make room for much student/faculty interaction.

Creation of electronic learning communities.

### Delivery of instructional content

Expert curriculum development

Clear statements of what curriculum is expected to do.

Understanding of cultural differences and needs; allow local option in selection of some of the content.

Based on best understanding of learning theory: attention to sequence; clearly stated objectives.

Select qualified content experts/authors and experienced materials developers.

The materials should "Work" as distance education materials, even if the student has no assistance other than the materials.

### Delivery of instructional materials to student

Sturdy, attractive materials

Books and materials that will last; of which the student can be proud; to which the student can make repeated reference.

By most efficient method: the mail is here to stay; use high tech methods if possible.

Reasonable cost; pricing based on the ability to pay in the country.

Commitment to first class program

Adequate funding

Adequate staffing

Needed delivery systems

Student support in the field

Administrative control of program

Team work on the part of all staff.

Develop guidelines that are based on outcomes more than process. Most accrediting (regional) bodies use the 4-year liberal arts college as the model for establishing guidelines. A more comprehensive model should be established to form the guidelines.

Understand the profile of the targeted student population:

Prior knowledge

Prior educational experiences

Context for undertaking this program

From these type of responses, eight classifications of criteria were identified. The criteria were sorted according to classifications. An illustration of this process is:

### **ADMINISTRATION**

#### Mission

Distance education program in theology is reflected in institution's mission.

Identification of the need for a distance education program.

#### Outside Authorization/Approval

Knowledge of appropriate (international, federal, and state) legal requirements for operating distance education programs.

Obtained the appropriate approvals from relevant governmental agencies.

Obtain and maintain recognized accreditation.

Collaborate with relevant accrediting bodies and their standards or criteria.

Potential students informed if the institution is or is not accredited by a reputable accrediting association.

#### Commitment

Commitment of the board, administration, and faculty to the program.

Institutional control of all programs and administrative processes.

Administrative control of program.

Development of a plan of implementation that takes into account training and funding as necessary components of the distance education program, and that is modifiable to accommodate changes in financial, educational and technological support.

Full integration into the vision of the theological education program.

Support of faculty/administration of the theological program.

#### Budget

Availability of financial resources required to initiate and maintain a distance education program.

Lack of special funding for the distance education program, which invites disaster, instability and usually

a (very) short lived program.

Establish realistic budgets.

Identify who is responsible for particular costs of e-mail, telephone calls, etc...

Maintain a balance in the fiscal budget between distance learning technology and more traditional forms of instructional delivery.

Choice of media takes into account the fixed and variable cost structure of the media and the projected unit cost given the projected number of students.

#### Market/Need

The potential interest or "market" of students for the distance education program.

Identification of market to be served.

Awareness of globalization.

Awareness of target audience.

Conduct a survey of the target population to determine need, receptivity, effectiveness, and cost/benefit ratio of proposed distance delivery programs.

Division of anticipated market into geographic, ethnic, linguistic, and technological sectors.

Conduct a needs assessment of each market sector.

Establishment of a profile of the targeted student population:

Prior knowledge

Prior education experiences

Contest for undertaking this program.

Target the mature student rather than the new high school graduate.

Allowance of credit (with limits) for experiential learning.

#### Program Structure

Use pilot sites on a small scale prior to implementing distance technological education programs on a state-wide or national scale.

Distance Education program within existing institution: Must emanate from the academic core -- difference is in delivery only, not a difference in the kind of programs offered.

Distance only or a distance version of an on-campus course.

Denominational links or not.



Avoidance of denominational bias.

Duplicate or similar criteria statements were combined to reduce the overall number of criteria. To avoid repetition of phrases and to emphasize the concepts being proposed, a table was created with eight sections corresponding to the eight categories of criteria. An operational area was identified within the eight categories, and a stem statement was created for each operational area. This process produced the second-round instrument (Appendix F).

**Appendix F**

**Round Two**



instructions

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**Appendix G**

**Round Three and Follow-up Fax**

February 24, 1993

Dear

Thank you for your participation in the international study to identify criteria for assessing effectiveness in the delivery of distance theological education. We have begun the third and final round of the study.

Enclosed are the instructions and the response form for the third round. You will see the form has a label with your name on it. Your responses will remain confidential; the label is for dataprocessing purposes only. Your assistance in quickly completing the form and returning it will be greatly appreciated.

We would like to complete the study by the first of April. To do so, it would helpful if we could receive your completed questionnaire by the middle of March. You may return the questionnaire by mail or Fax. Returning by Fax, if available, would be very helpful in reducing response time.

Response and question information:

FAX: (703) 231-7845

Phone: (703) 231-9720

E-Mail: (Bitnet) GSEEVERS@VTVM1

We will mail you a summary of the findings at the conclusion of the study in late April or early May.

Thank you for your participation.

Sincerely,

Gary L. Seevers, Jr.  
Research Associate

David J. Parks  
Associate Professor

instructions



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follow-up fax



## Appendix H

Twenty-one Criteria Rated Very Important by  
80 Percent or More of the Respondents

**Criterion Statements Rated "Very Important" by at Least 80 Percent of the Respondents**

Ninety Percent or Better Agreement

There is competent faculty able to provide instruction in the distance education mode.

The administration provides for the right of a student to be heard in the event of legitimate disagreement.

The administration provides the student full information on what is expected and what the student will receive.

The administration provides adequate funds to fulfill the program's mission.

The administration has the materials on hand when they are advertised.

The administration is truthful in advertising.

Eighty to Ninety Percent Agreement

The administration has identified a need for the distance education program.

The administration has obtained and maintained recognized accreditation.

The administration has enlisted the commitment of the faculty for the program.

The curriculum includes performance activities (requires students to do something).

The administration maintains security in the transmission and administration of course evaluation instruments.

The administration makes a commitment to offer the entire program as advertised even if enrollment drops off.

The administration has budgeted funds for the distance education program.

The curriculum contains clear statement of objectives.

The administration maintains the integrity of the copyright of learning materials and texts.

The administration has a stated refund procedure for those who must withdraw or who are legitimately dissatisfied.

The administration assure the confidentiality of technologically delivered information, especially when dealing with counseling of individuals, advisement, and other matters regulated by the right to privacy laws.

The curriculum is realistic in the time required of faculty to prepare materials and presentations.

The administration offers a program comparable in content and rigor to traditionally offered programs.

The administration has provided support staff to ensure the reliability of program delivery.

The administration encourages the presentation of debatable issues fairly.

## Vita

Gary L. Seevers, Jr.

Lot A-23  
3151 Pandapas Pond Road  
Blacksburg, Virginia 24060  
(703) 951-2497

### EDUCATION:

Ph.D. -- Virginia Polytechnic Institute and State University. Major: Educational Research and Evaluation. Blacksburg, Virginia. 1992.

Dissertation: "Identification of Criteria for Delivery of Theological Education Through Distance Education: An International Delphi Study."

CAGS (Certificate of Advanced Graduate Studies) -- Virginia Polytechnic Institute and State University, Major: Educational Administration -- Higher Education, Blacksburg, Virginia, 1991.

M.Ed. -- The University of Virginia, Major: Educational Psych-Foundations, Charlottesville, Virginia, 1986.

B.S. in Bible -- Valley Forge Christian College. Dual Major: Missions and Pastoral Ministry. Phoenixville, Pennsylvania, 1981.

E.T.T.A. Diploma -- (Evangelistic Teacher Training Association). Major: Christian Education, Valley Forge Christian College, Phoenixville, Pennsylvania, 1981.

Diploma -- High School, Way of Faith Christian Academy, Fairfax, Virginia. 1977.

### CREDENTIALS:

Ordained Minister -- The General Council of the Assemblies of God. Springfield, Missouri.

### PROFESSIONAL

#### ORGANIZATIONS:

Member -- Potomac District Council of the Assemblies of God, Fairfax, Virginia.

Member -- Phi Delta Kappa, Virginia Polytechnic Institute and State University Chapter.

Member -- American Educational Research Association.

Member -- United States Distance Learning Association (USDLA).

EXPERIENCE:

Editorial Assistant -- *The Community Services CATALYST*, National Council on Community Services & Continuing Education, Virginia Polytechnic Institute and State University, Blacksburg, Virginia. 6/90 - 1/93.

Graduate Assistant -- Virginia Polytechnic Institute and State University, AES Division, Graduate Studies Coordinator Office, Blacksburg, Virginia. 6/90 - 1/91.

Graduate Assistant -- Virginia Polytechnic Institute and State University, Center for the Study of Exceptionalities, Blacksburg, Virginia. 5/90 - 9-90.

---

Graduate Assistant -- Virginia Polytechnic Institute and State University, AES Division, Education Administration Program Area, Blacksburg, Virginia. 1/90 - 6/90.

---

Assistant Pastor -- Way of Faith Assembly of God and Christian Training Center, Fairfax, Virginia. 9/81 - 1/90.

Director and Vice-President -- S & P Contracting, Inc., Herndon, Virginia. 10/81 - 1/90. (Note: Operated as a Partnership from 10/81 - 5/87, incorporated in the Commonwealth of Virginia in May 1987).

Co-Pastor -- Patterson Assembly of God, Baltimore, Maryland. 2/80 - 10/81.

Self-Employed Contractor -- Baltimore, Maryland. 5/81 - 10/81, and 6/80 - 9/80.

Security Guard -- Miley Detective Agency, Norristown, Pennsylvania. 1/81 - 4/81.

Carpenter/Tile Setter -- Valley Forge Christian College, Phoenixville, Pennsylvania, 9/80 - 1/81 and 9/79 - 6/80 and 9/78 - 2/79.

Ministerial Assistant -- Park Avenue Assembly of God, Trooper, Pennsylvania. 9/78 - 2/80.

Computer Operator -- Cardone Industries, Philadelphia, Pennsylvania. 2/79 - 6/79.

Christ's Ambassadors President -- Way of Faith Assembly of God, Fairfax, Virginia. 11/75 - 8/78.

GENERAL: Born: East Lansing, Michigan  
May 5, 1958.

AWARDS: Ministerial Student Scholarship, Valley Forge Christian College, Phoenixville, Pennsylvania, 1980.

Dean's List, Valley Forge Christian College, Phoenixville, Pennsylvania, 1977-1980.

Salutatorian Scholarship, Valley Forge Christian College, Phoenixville, Pennsylvania, 1978.

Good Citizenship Award, Way of Faith Christian Academy, Fairfax, Virginia, 1977.

FAMILY: Wife: Deborah Ann

Children: Anna Leigh  
Gary Justin  
Marian Elizabeth