

**DEVELOPING A COMPREHENSIVE NEEDS ASSESSMENT
MODEL FOR IMPLEMENTATION IN
CONTINUING EDUCATION**

BY

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Abstract

Continuing Education practitioners strive to meet the educational needs of their students, who are primarily adult students whose educational needs are not met by traditional matriculation. It is the desire of Continuing Education to design, develop and implement educational activities that can be easily accessed and meet the needs of the adult student. As Continuing Education is motivated by a variety of goals, its successes range from providing educational programming that improves the adult learners knowledge to generating revenue. Recent literature reveals that needs assessment is a tool used to achieve these goals. It is therefore the purpose of this study to develop a needs assessment model for implementation in Continuing Education. Throughout the literature on adult education needs assessment, three key concepts are identified and discussed. These salient concepts comprise a practical ideal model for assessing continuing education activities and include **planning purpose, data collection and analysis, and utilization.**

In this research, the ideal model is used as a point of departure to validate and refine the model. Both survey questionnaires and interview questions are used to gauge the appropriateness and usefulness of the practical ideal model for needs assessment in Continuing Education, and to get feedback on the model from Continuing Education providers and professionals engaged in needs assessment. The table on the next page represents the practical ideal model for comprehensive needs assessment in Continuing Education.

The findings of the research indicate that the originally proposed needs assessment model derived from the literature was supported. As a matter of fact, responses to all but one of the sub-components indicated that those in Continuing Education that engage in needs assessment believe these components are important and comprise a comprehensive needs assessment model,

Comprehensive Needs Assessment Model in Continuing Education

Practical Ideal Categories	Sources
<p>I. Planning-Purpose¹</p> <p>A. Specifying A Needs Assessment Purpose</p> <ul style="list-style-type: none"> - Guided by mission, priorities, politics - Content areas - Level of educational need - Understanding needs of under-served populations - Targeting populations for specific educational needs - Delivery and scheduling preference <p>B. Scope of a Needs Assessment</p> <ul style="list-style-type: none"> - Target populations - Coordination - Resources - Level of Complexity - Ground Rules <p>C. Determining What to Assess</p> <ul style="list-style-type: none"> - Establishing priorities - Identifying content areas - Standards 	<ul style="list-style-type: none"> - Altschuld& Witkins, 2000 - Barbulesco, 1980 - Cassara, 1980 - Gilmore, Campbell & Becker, 1989 - Gupta, 1999 - Houle, 1972 - Knox, 2002 - Moore, 1998 - Moore, 1980 - Pennington, 1980 - Queeney, 1995 - Rouda & Kusy, 1995 - Sherry & Morse, 1996 - Swist, 2001
<p>II. Data Collection & Analysis</p> <ul style="list-style-type: none"> - Setting priorities - Indicators and sources of unmet educational needs - Individual versus group assessment - Assessment team - Selecting methods <ul style="list-style-type: none"> Understanding various methods Combining techniques Utilizing existing data Utilizing quantitative & qualitative data - Analysis 	<ul style="list-style-type: none"> - Altschuld& Witkins, 2000 - Barbulesco, 1980 - Cassara, 1980 - Gilmore, Campbell & Becker, 1989 - Gupta, 1999 - Houle, 1972 - Knox, 2002 - Moore, 1998 - Moore, 1980 - Pennington, 1980 - Queeney, 1995 - Rouda & Kusy, 1995 - Sherry & Morse, 1996 - Swist, 2001
<p>III. Utilization of Needs Assessment</p> <ul style="list-style-type: none"> - Coordination - Stakeholders us of data conclusions - Baseline data - Continuous assessment/evaluation 	<ul style="list-style-type: none"> - Altschuld& Witkins, 2000 - Barbulesco, 1980 - Cassara, 1980 - Gilmore, Campbell & Becker, 1989 - Gupta, 1999 - Houle, 1972 - Knox, 2002 - Moore, 1998 - Moore, 1980 - Pennington, 1980 - Queeney, 1995 - Rouda & Kusy, 1995 - Sherry & Morse, 1996 - Swist, 2001

¹ To contemplate the purpose for a needs assessment automatically begins its' planning phase. Therefore, I put the terms "planning" and "purpose" together under one category. Sometimes this category represents most of the work in a needs assessment.

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Developing A Comprehensive Needs Assessment Model For Implementation in Continuing Education

CHAPTER I: INTRODUCTION AND OVERVIEW

This research project addresses the use of needs assessment in Continuing Education. The purpose of this study is twofold. The first purpose is to develop a practical ideal model for needs assessment in Continuing Education based upon related literature. The second purpose is to refine the practical ideal model by getting feedback on the methodology from Continuing Education deans, directors and professionals engaged in needs assessment.

In any Continuing Education unit, considerable time is devoted to identifying and selecting ideas to develop into educational programs and services. Allocating finite resources to specific programming further increases the importance of identifying and assessing educational needs that will both serve the needs of the adult learner as well as benefit the Continuing Education provider. Determining the needs of the adult learner is a necessary part of program planning. Unfortunately, much of Continuing Education lacks a coherent, comprehensive process for program development. Needs assessment is recognized as that component in the process that is lacking and rarely implemented (Knox, 2002, p.44, Pennington, 1980, p.1 and Queeney 1995, preface xvii). Queeney (1995, p.7) believes that, if conducted properly, needs assessment can “revolutionize the program development process” and help the Continuing Education provider grapple with decisions associated with designing

effective and responsive educational programs, and setting educational objectives and setting educational objectives.²

This process does, however, raises questions such as “What is need?” “What needs can be met through educational activities?” “Whose needs are most important?” “What is the best way to determine need?” In this research study need is considered to be a deficiency between an individuals current and ideal state of knowledge, skills or performance abilities. It is also important to know that need is different from wants, interests or desires that are expressed by potential participants in an educational program. What one wants may be different from what the adult student needs most. Furthermore, educational needs are those met by educational programs.

Needs assessment consists of gathering data or information about a potential educational program and analyzing both the requirements of the potential audience deriving the greatest benefit from the program, and balancing the course benefit against the cost-effectiveness of the program. Needs assessment is a continuous process and is not an end in itself. Instead it is an integral part of program planning. The data gathered can be used to plan objectives, educational activities, marketing strategies, and make evaluative judgments.

Assessing educational need is extremely important and sometimes a difficult part of the program planning process. Needs assessment can also be a challenging process for the Continuing Education practitioner. It may be tempting to simply utilize familiar methods such as questionnaires or observations as ways to determine what educational activities the Continuing Education provider should offer its’ adult students. These techniques, however, may provide inaccurate information about the educational needs of the potential audience.

² For example see Altschuld & Witkins, 2000; Barbulesco, 1980; Gupta, 1999; Knox, 2002; Pennington, 1980; and Queeney, 1995.

The findings acquired from the needs assessment must be shared by those who can most benefit from them. Otherwise, the data gathered from the needs assessment will serve no useful purpose. Furthermore, without sharing the needs assessment results, it is difficult to get commitment and cooperation from stakeholders to conduct future assessments.

Chapter II and III review the relevant literature on the topic. Chapter II discusses Continuing Education and its' diverse nature. The myriad programming formats in Continuing Education profoundly illustrates how needs assessment can "revolutionize" the program planning process if it is used as a decision-making tool for planning Continuing Education programs. Chapter III goes directly into a discussion on needs assessment.

Chapter IV covers both the conceptual framework and the methodology used in this study. The conceptual framework summarizes the "ideal" model as a first draft or prototype. It is, thus, the basis for construction of both the survey and telephone interview instruments. Responses from the participants will point to the strengths and weaknesses of the model and enable prioritization of the components within the model.

Chapter V discusses the results of the survey and interviews. Several tables are provided to summarize the findings. This chapter moves directly into the conclusion.

CHAPTER II

THE DIVERSE PRACTICE OF CONTINUING EDUCATION

The purpose of this chapter is to describe various Continuing Education programming formats to illustrate the diversity of the adult education field. First, there is a brief discussion on “What is Continuing Education?” Several scholars offer their perspective of Continuing Education.

Sharon Merriam and Rosemary Caffarella (1991, p.30) posit that “learning in adulthood is an intensely personal activity. Yet at the same time, a multibillion-dollar enterprise has arisen in response to adult-learning – an enterprise that spends more dollars than elementary schools, high schools, and post-secondary schools combined.” The field of adult and continuing education is filled with an array of programs, agencies and people working to facilitate the adult learner. The focus on the adult learner that unites the otherwise diverse field called “Continuing Education.”³

Allen W. Lerner (1992, p.2) suggests that Continuing Education (CE), particularly Continuing Education in the “mega” institution’s that do comprehensive research, has the potential to become a tool to confront demands and challenges placed upon them by industry and government. By acting as a change agent, the Continuing Education unit can provide significant assistance with social policy issues. Lerner also posits that responding to the demands of government and industry, while grappling with a declining, traditional, student population, the mega-university can no longer cling to its conventional mode of education.

³ The term Continuing Education refers to the courses taught by educators and trainers who work with adults who engage in learning outside of the traditional school setting. Continuing Education (CE) is also known as Continuing Professional Education.

The traditional student in higher education is becoming increasingly rare. According to Jovita M. Ross-Gordon, Associate Professor of Education Administration and Psychological Services at Southwest Texas State University, in 1999, the adult student population, twenty-five years and older, grew by thirty-nine percent. Given the demographic and attitudinal shifts among the student population, the tensions caused by these shifts within higher education will need to be addressed. Donaldson and Ross-Jordan (1992, p.22) feel that C. E. could be used to accomplish the adjustments needed to meet the new challenges faced by higher education.

In the long term, Continuing Education can become the medium for a new synthesis of traditional research excellence with partially reoriented teaching and revitalized public service based on sophisticated institutional relationships. This includes more significant interaction not only with non-educational institutions but with four-year colleges and community colleges.

Rosemary Caffarella (1994, p. 30) states that the purpose of continuing education programs is to 1) “promote changes in the way workers behave to promote job performance; 2) encourage the growth and development of individuals and 3) assists adults to bring about change in societal norms and values.”

Wayne Schroeder (1980, p. 42) defines Continuing Education as “a developmental process used to link various agent and client systems for the purpose of establishing directions and procedures for adult learning programs.” Schroeder (1980, p.42) suggests that the adult educator is concerned with assessing needs, setting goals, selecting and prioritizing adult learner experiences, implementing teaching strategies and evaluating the outcome. Essentially, this process refers to programming. Those involved in programming range from directors of Continuing Education in community colleges and universities, to training directors in industry, social agencies, for profit or not-for-profit associations or those

involved in developing and delivering educational programs in a variety of community settings.

THE DIVERSE PRACTICE OF CONTINUING EDUCATION

The diversity of Continuing Education is unmistakably represented by its multiple providers and myriad programmatic and institutional practices. The programmatic and institutional diversity is so profound that it is not possible to report every instance. Therefore, this discussion illustrates rather than defines the scope of the field. The first practice of Continuing Education addressed here is adult basic education, or more commonly known as ABE.

Adult Basic Education: ABE

The National Education Goals Panel (1994, p.10) reported that “Every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.” This goal was suppose to be achieved by 2000, but instead it has become political rhetoric (Askov, 2000, p.247). Today, adult basic education (ABE) refers to nearly any fundamental skill that is regarded as essential for adult life. Technological advancement has expanded the definition of basic skills to reflect the need for adults to continue to adapt and retrain on a lifelong basis. The emphasis is on skills that help the adult to function in the real world, in an effort to meet the demands of a capitalist economy and effective citizenship.

According to Sparks and Peterson (2000, p. 263) effective citizens have the skills needed to be a tax-paying citizen and to contribute to the economy. This emphasis has directed the nature and purpose of literacy and basic skills education, which has also created a “crisis in accountability.”

Educators are often torn among meeting the goals and objectives prescribed by funding agents, local school boards, or other governing entities that may be in direct conflict with the needs of learners themselves. The crisis becomes particularly pronounced when (as often is the case) involved parties come from a position and different value systems (Sparks and Peterson, 2000, p. 263).

In 1998, the Adult Education and Family Literacy Act (Title II, Sections 201-251 of the Workforce Investment Act H.R. 1385) held ABE programs accountable to a core set of indicators including demonstrable improvements in literacy skill levels in reading, writing, speaking, use of numbers, problem solving, and use of the English language; placement, retention or completion in post-secondary education; training, unsubsidized employment, or career advancement, or earning a secondary school diploma or its equivalent.

The practice of ABE is closely tied to the specific functions of adults. As adults are workers, parents and members of a community, basic adult education is meant to help the individual adult learn to cope in the real world as well as meet responsibilities of adulthood. Many entities are involved in adult literacy programs and include schools, literacy councils, business and industry, social service providers and government. It is not uncommon to have the Continuing Education unit of a university or community college provide adult basic education programming as a way to meet the parent institutions mission or goals, or as a way that contributes to the local community.

Community Learning

D. Merrill Ewert and Kristen A. Grace (2000, p.327) asserts that “ordinary citizens can transform their own lives and communities through learning and action.” This assumption is embedded in the history of adult education and is the driving force behind

those individuals that are committed to helping others acquire knowledge and skills, and adopt new behaviors that improve communities.

Within the arena of community learning, there are basically three program formats in which educational activities are structured and organized. **Community resource centers** offer learning opportunities to individuals and groups within a community. Examples of community resource centers are libraries, community colleges, and museums. **Community development** oriented formats center on the educators who serve as resource people or consultants to groups that actively focus and promote change in the community. **Community action groups** are formed primarily for social action. Examples of these groups are churches, human rights groups and civic organizations. Although the primary purpose of the organizations may not be learning, through their activities, these organizations often times foster learning and development (Caffarella, 1994, and Fellenz, 1998). Through these community based learning centers scholars and activists from many fields are able to contribute to the development of political and social civic identity and the transformation of society.

Individual Learning Formats

According to Robert Fellenz (1998, p.354), adults engage more in learning activities on an individual rather than on a group basis. The following are just a few of the formats that can be included under individual approaches to adult learning. 1) **Self-directed study** allows the adult to have the primary responsibility for planning, carrying out, and evaluating their learning experiences. To document this type of format, a personalized learning plan or contract is used. 2) **Pre-packaged or programmed instruction** consists of using programmed texts and booklets as well as a growing use of computers, videotapes, or a

combination of print, audio and video devices. Educational material is presented in a planned step-by-step sequence, with the student getting immediate feedback on the extent of their learning. 3) **Apprenticeships or internships** involve a format relationship between student/employee and employer. The employee is trained for a specific skill through practical experience under the supervision of experienced workers. According to Fellenz, (1998, p.357) these approaches to learning have has a long history of successful use in training adults. 4) Caffarella (1994, p.153) describes **on-the-job training**, as “instruction provided by a master or expert worker to a novice while both are on the job and engaged in productive work. This format is often used when the work is complex and the worker or craftsman is the best person to pass on the knowledge and skills to other workers.” 5) **Computer-based instruction (CBI)** consists of delivery of instruction via a computer. Commonly this form of instruction involves tutorials, simulations, and problem-solving. CBI can also be used in conjunction with distance-learning programs (Caffarella,1994, p. 155 and Fellenz,1998, pg.347-70).

Group Learning

Another type of learning format falls under small, face-to-face platforms. Examples of this type of format include the following. 1) **Short courses** comprised of groups with a fixed enrollment that meet at predetermined times for the purpose of learning a specific subject matter under the direction of an instructor. 2) **Seminars** that focus on discussion of knowledge, experiences and projects of group members. Seminars involve participants that possess knowledge and skills in the content area of the seminar. The instructor acts as a resource and facilitator. 3) **Workshops** are intensive group activities that emphasize the development of the adult students skills and competencies in a defined content area. The

emphasis is on group participation. 4) Caffarella (1994, p. 153) includes **collaborative research projects** under this category, which are “groups of people working together to respond to research questions related to practice. The final product would include both research findings and conclusions and an action plan related to this material (Caffarella, 1994, p.153). 5) **Clinics** are sessions that focus on a specific problem or skill. Participants present case studies of practice problems to a single expert or a panel of experts. The expert(s) act as consultants (Caffarella,1994, p. 155 and Fellenz,1998, pg.347-70).

Distance Education

Included under this learning format are 1) **correspondence study** which consists of prepared printed instructional material such as course syllabi, manuals, workbooks, that are delivered to the student’s home or office, in which the participant engages in reading and learning activities and sends assignments to instructors for a grade, 2) **audio-conferencing** which links one or more sites together to exchange information verbally between program participants, 3) **broadcast/cable television** which transmit educational programs by broadcasting stations or cable television companies, and 4) **satellite communication**, which delivers video and audio educational programming picked up by satellite reception dishes in the classroom, business, hotels, home and other sites where the satellite communication can be received (Caffarella,1994, p. 155 and Fellenz,1998, pg.347-70).

Continuing Professional Education

Because Continuing Education spends much time providing educational activities for the professional, the rest of this chapter is devoted to a discussion on Continuing Professional Education.

The assessment of educational need in Continuing Education is frequently associated with Continuing Professional Education (Nowlen,1988). Griffith (1995, p. 102) and Queeney (1995, p. 375) espouse that Continuing Education may be viewed as a generic field of practice, while Continuing Professional Education is “a subspecialty of C.E., that focuses on programming for individuals who have earned professional qualifications in a field, and are seeking additional educational experiences to update and enhance their skills and knowledge in their profession.”⁴

Continuing Professional Education is a concept that has been around since the Middle Ages when apprenticeships and guild systems were the vehicle for ongoing education for professional practitioners, and was an “informal adjunct of professional practice into modern times” (Queeney, 2000, p. 375). In the 1960’s, Continuing Professional Education was given its name and recognized as a component of Continuing Education. The expansion of technology and knowledge bases, changed within professions and the emergence of new professions led to the need for a more structured, ongoing education for professional practitioners (Houle, 1980). Also at this time, professional responsibility, accountability, and service was being questioned by government agencies, consumers and professionals, there was a call for improved and explicit training to rectify the problems (Azzaretto, 1990, p. 25).

Certification

In response, individual professions and regulatory agencies ushered in the establishment of continuing education requirements for licensure, certification, or practice

⁴ The terms Continuing Education and Continuing Professional Education are often used interchangeably. C.E. is also referred to as Continuing Professional Education because it refers to the continuing education of professional practitioners, regardless of their practice setting, that extends the learning process throughout the professional practitioners career. The term professional is used broadly to describe a wide range of occupations.

(Stern and Queeney, 1992). Nevertheless, it didn't take long for people to realize that Continuing Professional Education was not a guarantee of competence. Yet, viable alternatives have yet to be discovered (Queeney, 2000, p. 376).

Queeney (2000, p. 376) posits that Continuing Professional Education needs to examine current challenges facing the field, and then explore strategies that might be employed to address those challenges. Queeney addresses these issues with the underlying assumption that “continuing professional educators must move beyond simply providing programs, to being major contributors to the support of ongoing professional competence.” Continuing professional educators will find themselves increasingly acting as performance consultants, “faced with balancing educational principles and integrity with expectations that they operate in a business-oriented, and perhaps even profit-generating mode.”

Competency in Continuing Professional Education

Queeney (2000, p. 376) maintains that although Continuing Professional Education is not the single answer to competence assurance across professions, it has the potential to be an important player in the promotion of competent practice. Employers, regulatory agencies, and professionals themselves realize that Continuing Professional Education is no longer a guarantee of learning or improved competence (Azzaretto, 1990, Houle, 1980, and Stern and Queeney, 1992). Those paying for Continuing Professional Education are also requiring documentation of demonstrable linkages between continuing professional education and professional performance – proof that their education dollars are well spent (Queeney, 2000, p. 376 and Gupta, 1999, p.4).

To affect the competence of the professional, Continuing Professional Education must address the practitioner's educational needs, or areas of deficiency in the workplace.

This means that Continuing Professional Education providers must understand the relationship between the individual professional and the workplace, attitudes about the workplace, and the individual professionals themselves. The Continuing Professional Education providers' challenge is to identify the professionals' performance gaps and educational needs, and address those needs with appropriate professional education that "lends itself to direct application to day-to-day practice" (Queeney, 2000, p. 376).

Continuing Professional Education is not the single answer to competent performance. Competence is traditionally measured on an individual basis, comprised of three components, (knowledge, skills and performance abilities) in which each practitioner of a given profession is suppose to master. Knowledge is the easiest competency to address and is usually the focus of Continuing Professional Education. Skills and competencies take second place.

In addition to maintaining and enhancing knowledge and skills, the professional must also possess the performance abilities to function competently within the workplace (Queeney, 2000, p. 377). Queeney (2000, p. 377) states that "it is increasingly apparent that performance abilities have been neglected not only within Continuing Professional Education but also in pre-professional education and by those seeking to evaluate practitioner competence." One reason for this may be the difficulty in providing applied or hands-on oriented educational experiences that link directly to the application of knowledge and skills in the workplace.⁵

⁵ An example of this practice-oriented educational experience is the workforce training conducted by the Department of Technology, in collaboration with the Office of Continuing Education at Southwest Texas State University. Some training such as advanced mathematics, machining and blueprint reading, and many other courses are conducted at the work site. Half of the course work is theoretical and conducted in the classroom, while the remainder of the training is done on the job so that the student can directly apply what they learned in the classroom.

Queeney (2000, p. 377) notes that a significant component of the practice setting inherent in performance abilities is the other professionals with whom the practitioner must work. Professionals can rarely solely rely on their own capabilities and must work as part of a team. There are several reasons for this. First, an increasing number of professions practice in a group setting such as health maintenance organizations or large accounting firms. Second, the complexities of the job (for example care for the elderly) require a growing reliance on interdisciplinary teams that include professionals from a variety of fields. Third, professions are becoming more specialized, requiring several practitioners within a broad field such as education to address a problem.

Accountability

Another challenge that continuing professional educators face is accountability. Few professions that serve the public escape the demand for accountability. To address accountability issues, some professional associations have developed credentialing systems. In other situations state legislatures have established processes to enforce accountability (Collins, Queeney, Watson and Zuzach, 1988). Queeney (2000, p. 378) criticizes these programs because they have weak compliance and assessment requirements. In some professions, both professionals and government are mandating Continuing Professional Education for renewal of license or certificate to practice. Queeney, (2000, p. 378) suggests that if Continuing Professional Education is to viably respond to questions of accountability, then “evaluation methods measuring the effects of continuing professional education activities on practitioner performance will be required.” No longer will program evaluation that addresses participant satisfaction be acceptable.

One other challenge Continuing Professional Education faces according to Queeney, (2000, p. 379) is its' ability to successfully address professionals' educational needs so as to enhance their performance abilities and their application of knowledge and skills to real-life situations that they encounter in daily practice. The ability for Continuing Professional Education to link the practitioner's knowledge and skill competencies to a practice context goes beyond simply providing information and teaching technical procedures. "It must help professionals build their collaborative, judgmental, reflective and integrative capabilities" (Queeney, 2000, p. 379). Nowlen (1998, p. 69) maintains that "the relationship between continuing education and performance is unsatisfying when it is based simply on the relationship between a job description and an individuals knowledge and skills."

Producing continuing professional education programs that apply the practitioner's knowledge and skills to real-life situations that relate to their practice requires a team approach. The design, development and delivery of practice-oriented educational activities requires access to content experts who can provide technical information and partnerships with those that can give the Continuing Professional Education provider an accurate, comprehensive understanding of the professionals' work environment, behavior and individual concerns. This type of educational activity is costly to develop and deliver, and is therefore usually expensive for the participant. There are not only up-front costs, but the resulting participant cost is often enough to deter enrollment. As Queeney (2000, p. 379) points out, "until professionals and/or their employers recognize the value of practice-oriented continuing professional education to practitioner performance, they may be unwilling to pay the necessary costs. And, unless Continuing Professional Education providers are able to demonstrate that value, it will not be seen."

Critics of the current system (Lankard, 1995, ERIC No.161, and Queeney, 2000, p. 378-79) maintain that the challenges cited above will not be overcome by offering professionals the standard array of lectures and seminars. Concerns over professional accountability demand assessment of the practitioner's strengths and weaknesses, an understanding of the practitioner's specific educational needs and an evaluation to determine how well those needs have been met. In addition, Queeney (1995, p.379) notes that often Continuing Professional Education providers do not have all the resources to accommodate the educational needs of the professional learner. The Continuing Professional Education provider needs greater skills in developing instructional programs and materials, as well as the technology and competency required to deliver programming in a variety of formats.

Thus, Continuing Professional Education providers will need to re-define the way they do business to keep up with the educational needs of the professional, as well as acquire "new capabilities, including those related to collaboration, needs assessment, practice-oriented instructional design and delivery, performance-based evaluation, inter-professional education, and distance education" (Queeney, 2000, p. 379). Ideally, the role of Continuing Professional Education will change.

No longer simply program providers, they (Continuing Professional Education providers) will become performance consultants to the professionals they serve, their employers, and the professionals themselves. At the same time, they are being asked to balance good education principles against the increasingly entrepreneurial demands of their organizations and institutions, forcing them to adopt cost-effective strategies for designing, developing and delivering continuing professional education (Queeney, 2000, p.380).

Assessing the Professional's Educational Needs

Continuing Professional Education is comprised of several stakeholders including adult and continuing educators, faculty members, professional associations, regulatory

agencies, employers of professionals and the professionals themselves. Needs assessment is a decision-making tool that these constituencies can employ to identify the educational needs of the professionals they strive to serve. Needs assessment offers the continuing professional educator a way to identify the professionals' strengths and weaknesses by providing data that is useful in determining the content and educational programming needed to enhance and maintain the practitioners competence. What follows in Chapter III is a much more detailed discussion of needs assessment and its' usefulness in Continuing Education.

CHAPTER III

NEEDS ASSESSMENT IN CONTINUING EDUCATION

INTRODUCTION

The purpose of this chapter is to discover and propose, through recent literature, the components of the practical ideal model for needs assessment in Continuing Education. The Chapter begins with a discussion on the importance of needs assessment in Continuing Education, and a definition of what constitutes need. Next, needs assessment components are identified, followed by a needs assessment model proposed for implementation in Continuing Education.

The current fiscal climate has brought on economic constraints that have Continuing Education providers intolerant of weak educational programs (Queeney, 1995, p. 2) Furthermore, professions in human resource development, health care professionals, and continuing medical educators have also become cautious about how to manage training dollars.⁶ Escalating costs and diminishing budgets leave continuing educators and other professions with no choice but to eliminate weak programs. Individual clients requiring new and updated technical skills cannot waste limited time on education that fails to give them the knowledge, skills or performance abilities they need (Queeney, 1995, p.2). Employers want to spend their education dollars wisely, and want assurances that an educational program will do what it promises. Although assessment does not guarantee educational success, it can provide information, when properly used, that can significantly increase the likelihood of meeting educational goals.⁷

⁶ For example see Gilmore, Campbell and Becker, 1989 p.3; Gupta, 1999 p.4; and Rouda and Kusy, 1995 p.255.

⁷ For example see Altschuld and Witkins, 2000, p.11; Barbulesco, 1980, p. 73; Gilmore, Campbell and Becker 1989, p. 19; Knox, 2001, p.44; Moore, 1980, p.91; Queeney, 1995, p.2; Rouda and Kusy, 1995, p.255; and Swist, 2001 at http://www.amxi.com/amx_mi30.htm.

According to Queeney (1995, p.2) continuing education programs neglect needs assessment. But, for the Continuing Education provider needs assessment is a necessity if Continuing Education plans to offer large programs or programs on a regular basis, or seek new student audiences to deliver training. To assure continuous quality improvement within a Continuing Education unit, assessment is an essential component of the planning process because it helps to define the ways in which Continuing Education best serves its clients.⁸

Effective needs assessments do not have to be costly, nor do they have to be performed at the most rigorous and complex level. Valuable data can be collected from focus groups, supervisor interviews and other simple methods, provided these types of assessments are well planned, with attention to thoroughness and detail. The data collected can help the Continuing Education practitioner identify a “target population”, “select program content”, “choose appropriate instructional methods” provide delivery and scheduling formats and a plethora of other valuable information. Queeney (1995, p. xiv) cautions the Continuing Education providers noting that the results from well designed and executed needs assessments must be accepted, regardless of whether they coincide with the continuing educators own expectations, beliefs or prejudices. Also, effective needs assessments should be conducted by a team of individuals who’s experience and expertise complement the programming being assessed (Altschuld & Witkins, 2000, p. 77, Knox, 2001, p. 43 and Queeney 1995, p.xiv).

A solid needs assessment supports both Continuing Education and its clients (Queeney, 1995, p. 17). Reliable data can substantially increase Continuing Education’s ability to provide a responsive educational activity to the right student audience that will

⁸ For example see Altschuld and Witkins, 2000, p.17; Barbulesco, 1980, p. 73; Knox, 2001, p.43; Moore, 1980, p. 91; and Queeney, 1995, p.377.

enable mastery of needed knowledge, skills and performance abilities. Otherwise, these educational activities do not meet the expectations of the continuing educator or its clients.

To establish a foundation for understanding needs assessment, this study tries to answer questions such as: What constitutes need? “Are educational needs different from other needs (Moore, 1980, p.1)?” How are needs related to interests, wants, lacks and deficiencies? Who should identify the educational needs of individuals or groups? “How can the Continuing Education practitioner effectively identify, select and analyze adult student educational needs? To answer these questions, the concept of “need” is discussed first.

WHAT CONSTITUTES NEED?

Generally, need is defined as a gap between “what is” and “what ought to be,” and the needs assessment is a tool used to identify the gaps, and to help determine if the gaps or discrepancies can be solved through educational programming or training.⁹ If a need is educational it is capable of being satisfied through an educational experience that provides appropriate knowledge, skills or performance abilities.¹⁰ Knowledge, skills and performance abilities are a requirement in all professional and personal activities (Queeney, 2002, p. 73). Kasworm and Marienau (1997, p.5) note that “the future viability of our economy is dependent upon a knowledge and skills based workforce, as well as leadership that requires the continuous educational improvement of its employees.

Alan Knox (2001, p. 44) states that “proficiency is the combination of knowledge, skills and attitudes that constitute the capability to perform well when presented with an

⁹ For example see Aherne, Lamble, Davis, 2001, p.6; Gupta, 1999, p.4; Knox, 2001, p. 44; Moore, 1980, p.2; Pennington, 1980, p.1; Queeney, 1995, p.2-7; Swist, 2001 at http://www.amxi.com/amx_mi30.htm;

¹⁰ For example see Barbulesco, 1980, p. 78; Gupta, 1999, p. 4; Knox, 2001, p. 44; Moore, 1980, p. 2; and Queeney, 1995, p. 8.

opportunity. In Continuing Education needs assessment, the “focus is on adult learning, but findings are often aggregated to characterize widespread educational needs within a group, organization or community.” Moore (1980, p.2) supports Knox views and states that “needs can deal with desires, interests, or deficiencies. They can be specified for an individual or can be aggregated for groups, organizations, or the-society. The changed set of circumstances can be described in terms of ways of altering the current situation.”

For Aherne, Lamble, and Davis (1998, p.9) the concept of need is one that is widely used and poorly understood in adult and Continuing Education, and is the most “deceptively complex, basically significant, and far reaching in its implications of all major terms in the vocabulary of the adult educator.” Much of this confusion stems from the fact that needs differ from wants or demands.

Needs, wants and demands all play a role in planning continuing education and training activities, and each can be identified in a needs assessment. However, an educational activity may seem attractive, or the instructor entertaining, which may appeal to the desires or wants of a potential participant and may be legitimate reasons for participating in such an educational experience, but those factors do not constitute need. Furthermore, demands may occur to correct a problem, prepare for future educational activities or to enrich a program, but the education pursued may or may not result in a demand for programming (Queeney, 1995, p.4).

There is also the issue of group needs. Differing groups have varied needs. Most needs assessment is directed towards identifying individual learner’s needs, but others such as instructors, employers and society also have needs that can be identified and can affect educational programming (Queeney, 1995, p.4 and Moore, 1980, p.2) For example, Moore

(1998, p.133) considers Continuing Medical Education as an important way for physicians to update their knowledge and skills to provide the best possible health care to their patients.

Gupta (1999, p. 40) states that “a strategic needs assessment provides Human Resource Development professionals with a systematic approach for examining existing performance problems or developing solutions to new performance needs.”

Ideally needs assessment provides the Continuing Education practitioner with the legitimate needs of the individual and group learner. This is the basis for effective educational programming.

Types of Needs Assessment

For Altschuld and Witkins,(2001, p. 9) need has three levels, each with different audiences. Levels one and two will be discussed for the purpose of this discussion. Level one consists of those that directly benefit from services. These services have been developed through an educational program that resolves a high-priority need. Examples of these target groups are students, clients, patients and customers, “Level two is composed of individuals or groups who deliver services to level one.” Examples are teachers, social workers, counselors, health care professionals, librarians, policymakers, administrators, and others. Individuals that comprise level one are the primary reason for the existence of level two. Therefore, the initial needs assessment data collected from databases and sources should shed some light on the educational deficiencies faced by those that directly benefit from the service (level one) (Altschuld and Witkins, 2001, p. 8).

Those that deliver the educational programming may also use market research to determine appropriate programming. As mentioned earlier, needs assessment identifies gaps between “what is” and “what ought to be,” but when broadly defined, educational needs

assessment can move beyond the realm of examining deficiencies in knowledge, skills and performance abilities and into the domain of market research. When market research becomes a purpose for needs assessment, other factors such as appropriate program design, program delivery, scheduling and even promotional activities may need considerations (Knox, 2001, p. 44-45 and Queeney, 1995, p.5). When needs assessment are tied to market research, it is important that the needs assessment provide data that is closely tied to identifying educational needs. Otherwise, lack of consideration of the educational needs of specific target audiences may produce educational programming that is wrong for that target population.

Level of need can vary from simple to complex. Queeney (1995, p. 5-7) posits that “the full continuum of needs assessment methods ranges from simply asking people what they consider to be their educational needs to employing sophisticated measurement devices.” Queeney (1995, p. 7) maintains that a successful needs assessment identifies a method “appropriate to the issue and to one’s goals and resources, and implementing it well. There must be accurate collecting, recording, analyzing, and interpreting of data.”

Several factors must be considered, however, before the Continuing Education practitioner embarks on the simplest of needs assessment. Examination of resources available for the assessment and the range of feasible programming possibilities help define the scope, purpose and complexity of the assessment.¹¹ Decisions about types of data used to assess educational needs can be made by setting priorities, identifying content areas to be assessed, clarifying a focus on knowledge, skills or performance abilities and determining those educational needs that are most relevant to potential participants and the goals and

¹¹ For example see Barbulesco, 1980, p. 77; Knox, 2002, p. 46-50; Moore, 1980, p. 7-11; and Queeney, 1995, p. 7.

mission of the Continuing Education unit. Target populations also have to be identified and the commitment of a needs assessment team or committee is an invaluable asset and essential to a successful needs assessment (Altschuld & Witkin, 2000, p. 21, Barbulesco, 1980, p. 77, Knox, 2001, p. 49 and Queeney, 1995 p. 7). These myriad of issues surrounding needs assessment are addressed in the remainder of the chapter.

NEEDS ASSESSMENT MODEL IN CONTINUING EDUCATION

As stated earlier, the purpose of this study is to develop a practical idea model for needs assessment that can be implemented in Continuing Education, based upon review of related literature. Throughout the literature on adult education needs assessment three key concepts are identified and discussed. These salient concepts comprise the key categories of an ideal model for assessing Continuing Education activities and include:

- **Planning-Purpose**¹²
- **Data Collection & Analysis**
- **Utilization**

The remainder of this chapter discusses these key concepts in greater detail.

Planning-Purpose

Experts such as Continuing Education practitioners, Human Resource Development, health care professionals and others agree that the planning for and purpose of a needs assessment is the first phase of the process.¹³

¹² To contemplate the purpose of a needs assessment automatically begins its planning phase. Therefore, I put the terms “planning” and “purpose” together under one category. Sometimes this category represents most of the work.

¹³ For example see Altschuld and Witkins, 2000, p.18; Barbulesco, 1980, p. 73; Gilmore, Campbell & Becker, 1989, p. 15; Gutpa, 1999, p.4; Knox, 2002, p.44; Moore, 1980, p. 133; Moore, 1980, p. 96; Pennington, 1980, p.2; Queeney, 1995, p.29; Rouda and Kusy, 1995, p. 255; and Swist, 2001, at http://www.amxi.com/amx_mi30.htm)

Needs assessment is a term that is used to describe a process that has three purposes; 1) specifying a needs assessment purpose, 2) determining the scope of the needs assessment and 3) determining what to assess.¹⁴

Alan Knox, (2000, p.28) asserts that early in the assessment process, the individual or group conducting the needs assessment must make value judgments related to both the program characteristics and the expectations of the participants, instructors and those providing administrative resources. The purpose of the needs assessment identifies the discrepancies between desired and actual program characteristics. Human Resource professionals involved in employee training suggest that the primary reason for conducting needs assessments is to ensure the need for training and to identify the content of the training program.¹⁵

Carolyn Barbulesco (1980, p.77) suggests that specifying the planning-purpose for a needs assessment consists of “deciding the why of a needs assessment.” From a different perspective, Donna Queeney (1995,p.29) and Alan Knox (2002, p.45) assert that the purpose of a Continuing Education needs assessment is usually guided by the parent institution’s mission, goals, strengths or priorities. Other factors that determine the purpose for a needs assessment are the Continuing Education unit’s past successes and failures, as well as the current socioeconomic and educational climate. A statement of purpose emerges from the opportunities and constraints experienced by the Continuing Education unit, in addition, the reasons for a needs assessment are revealed. Specifying the needs assessment purpose forces

¹⁴ For example see Altschuld & Witkins, 2000, p. 19; Knox, 2001, p.45; Pennington, 1980, p.3; and Queeney, 1995, p.30.

¹⁵ For example see Gupta, 1999, p.9; Rouda & Kusy, 1995, p.254; Swist, 2001, at http://www.amxi.com/amx_mi30.htm.

the continuing educator to make decisions about the various aspects of needs assessment such as scope and determining what to assess. A discussion of each of these issues follows.

Planning-Purpose: Specifying a Needs Assessment Purpose

Specifying a needs assessment purpose includes several issues; 1) content area, 2) level of education, 3) understanding needs of underserved populations, 4) targeting populations for specific educational needs and 5) delivery and scheduling preferences of continuing education programs. Needs assessment often begins with a series of questions. Should continuing educators explore the educational needs of specific groups or should they identify underserved populations first? Should they look for audiences¹⁶ that can benefit from the expertise of faculty members research, or should they capitalize on forming partnerships with other institutions?

Identifying the program content is one of the major tasks of individuals engaged in planning educational programs (Houle, 1972 and Queeney, 1995). This component of identifying ideas or content for programs is one of the primary purposes for conducting a needs assessment.

1) Content Areas

The purest form of a needs assessment is the identification of educational needs. Identifying the gap between current and desired educational conditions that can be translated into an educational activity is the primary purpose of most needs assessments. Information may be gathered on a target population or a less defined audience. If the needs assessment

¹⁶ A Continuing Education audience is comprised of students that are generally adults with a variety of educational, occupational, social and cultural backgrounds. Often C.E. providers refer to their students as clients because of the revenue generating nature of C.E. There are pros and cons to the C.E. unit that operates like a business, and the weak philosophical commitment the parent institution makes to its C.E. entity, but this discussion is not the purpose of this research paper. In this study, it's important to realize that in C.E., the term students and clients is interchangeable.

purpose is to define content area of educational need, it must specify the group(s) for which needs are to be identified.

Ideally, needs assessment that focuses on content area identify topics about which the target population requires better skills, knowledge or performance abilities (Knox. 2002, p.46 and Queeney, 1995, p.30). An example of a purpose that addresses educational need content is the needs assessment Sherry and Morse (1995m p.6) conducted for the Pacific Mountain Network in Denver, Colorado. “Under the Far View Distance Learning Project, the Pacific Mountain Network was granted the responsibility to develop and administer public television programming, educational products, and planning and dissemination of distance education courses throughout the Greater Denver area” (Sherry & Morse, 1995, p.6) A needs assessment was conducted for Pacific Mountain Network by the University of Colorado at Denver. The needs assessment identified the training needs of teachers, site facilitators, and other team members involved in the utilization of distance education for instruction. It was determined that training was needed to familiarize those involved in the project with distance education technologies and methods and strategies for using telecommunications media. To address these issues, the Pacific Mountain Network, the University of Colorado and the Denver public schools collaborated in the development of a professional development certificate for “promoting the awareness and use of distance education.” In this particular needs assessment, the certificate program targeted “pre-service educators,” “in-service educators,” and “professional development personnel” (Sherry & Morse, 1996, p.10).

2) Level of Education

Educational activities can address most content areas at any level of complexity. Someone with little or no knowledge of a topic may need to begin with an elementary level

program, while more knowledgeable individuals may only need to enhance or update their knowledge or skills. Identifying the potential adult students level of knowledge is very useful in developing educational activities that meet student educational needs (Queeney 1995, p.32). An example of purposes related to level of education needed may be determining internal auditors level of familiarity with recent changes to state laws affecting auditing practices.

3. Under-Served Populations

Another purpose for conducting a needs assessment is to address the needs of the educationally underprivileged. Through needs assessment continuing educators can learn which student populations are not getting their educational needs met by existing programs and which programs do not accommodate a particular population's location, scheduling preferences or ability to pay. For example, tenants of subsidized housing have traditionally been considered "under-served." Training dedicated to this group may be useless unless their needs are taken into account through careful needs assessment (Cassara, 1980, p.44).

4) Unique Target Populations

A Continuing Education unit may possess a unique expertise in a particular content area or have faculty who are recognized for their research or teaching. Needs assessment can capitalize on those unique capabilities by targeting adult students that can benefit from such expertise.¹⁷ For example, an institution that has their own semiconductor fabrication laboratory may choose to hold continuing education programs. The program would provide information that covers the major fabrication processes for the non-technical individual associated, directly and indirectly, with semiconductor fabrication. Participants would get an overview of the industry to understand the basics of semiconductor devices.

5) Delivery and Scheduling Mode Preferences

Sometimes a needs assessment is conducted to understand the students program delivery and scheduling preferences. “Different types of program delivery suit different audiences” (Queeney 1995, p. 35). Because adults have varied lifestyles, some may prefer programs offered at their place of work, while others may not have the time or money to leave work for a workshop or seminar and prefer distance education. Some adult students may find the traditional classroom and teacher format to their liking. Because of the many possibilities, it is important to understand an audience’s delivery mode preferences. An example of a purpose that addresses delivery mode preferences is the determination of whether purchasing managers within a specific geographic region have access to computer links for student/student and student/instructor satellite tele-conferencing.

When considering scheduling of adult educational program, the needs of potential participants should be the primary concern. Season, day of week, time of day, hours and location must all be considered. Appropriate scheduling can make the difference between success and failure of a program. For example, it is useful for the continuing educator to determine whether physicians prefer to learn about malpractice law in a series of one-day workshops in a metropolitan area or in a weeklong program offered at a resort location (Queeney, 1995, p.35-36).

Continuing Education is comprised of multiple purposes and ways to address specific adult audiences’ educational needs. Table 3.1 summarizes the five sub-components for specifying needs assessment purposes, which are incorporated into the needs assessment model.

Table 3.1: Specifying a Needs Assessment Purpose

¹⁷ For example see Cassara, 1980, p.344; Knox, 2002, p.29; and Queeney 1995, p.34.

Planning-Purpose	Need/Issue	Audience
1. Content Areas	Identifying topics which enhance or upgrade students skills, knowledge or performance abilities.	Individuals Groups of Individuals
2. Level of Education	Identifying the potential adult students level of knowledge or educational need.	Individual Example: Internal auditors knowledge of state laws affecting auditing practices.
3. Under-Served Populations	Identifying the unmet educational needs of a specific group of individuals.	Targeted Populations of Individuals Group Audiences. Example: Tenants (targeted populations) of subsidized housing.
4. Unique Target Populations	Capitalizing on a unique expertise in a particular subject matter that is targeted towards adult students that can benefit from the expertise.	Targeted Population Example: Continuing Education parent institution with a semiconductor fabrication laboratory that is used to provide courses on the basics of semiconductor fabrication to individuals directly and indirectly involved in the field.
5. Delivery and Scheduling Preferences	Identifying preferred program delivery and scheduling formats.	Targeted Population of Individuals Example: Purchasing managers that have access to computer satellite links for educational programs that enhance their job skills and knowledge.

Planning-Purpose: Scope of a Needs Assessment

The “planning-purpose” phase of a needs assessment also requires decisions to be made about the scope of the needs assessment. The scope of needs assessment includes considerations of target populations, coordination, resources, level of complexity, and ground rules and timelines.

Defining the scope of a needs assessment involves specifying the range of the study. (Barbulesco, 1980, p.77, Knox, 2002, p.48 and Queeney, 1995, p.38). The continuing

educator addresses questions such as whose needs are to be targeted, who should be involved in the process, and who should use the information. So, what can realistically be accomplished from a needs assessment? Queeney (1995, p.38) posits that there are two key aspects of the scope of a needs assessment.

The scope of a needs assessment – including the magnitude and characteristics of the population under consideration and the breadth and depth of the content areas to be examined – has important ramifications for the assessment’s methodology and design. Defining these characteristics is a critical step in the needs assessment process.

Knox (2002, p.48) also asserts that explicit consideration of content and target populations enable subsequent data collection and evaluation.

1) Target Populations

Early in the planning stages, the continuing educator should decide on the target audience to be assessed (Knox 2002, 47). Determining the size and diversity of the population being assessed is a key factor in defining the scope of a needs assessment scope. Target populations can be described by geographic area, organizational setting, profession, occupation or other demographic characteristics. A target audience can be stratified and a sample drawn using these characteristics – an approach with particular merit if the intent is to develop programs for total populations. If this is too broad a population, the target audience may need to be put into subgroups” (Queeney, 1995, p. 38).

Queeney (1995, p. 43) notes that members of a group often share similar characteristics. Planning is facilitated when program developers are familiar with all the characteristics within a group. Group familiarity is especially helpful when determining specific needs assessment methods and how receptive members of a specific group may be to participation in a needs assessment. Additionally, groups that are within a given company or

members of a community organization such as the Rotary Club are easily accessible, while tracking and obtaining information from other groups may be difficult, impossible or too costly. To access these groups the continuing educator may need to identify a similar group or a “representative sample” whose assessment can “yield comparable data” (Queeney, 1995, p.44 & 45).

Sometimes supplemental data sources are needed to access hard to reach target populations. These sources may include census data, local or state planning reports and commercial and government maintained databases.¹⁸

For the health care professional, secondary information provides insights that are derived from analyzing raw data and published data summaries. Sources of these data include “libraries, reports or experts and authorities, agency and organizational reports and commercial information services” (Gilmore, Campbell, & Becker, 1989, p.18).

According to Queeney (1995, p.46) it is also important to consider the physical and mental capabilities of the target populations, as well as their ability to communicate. Take again the tenants in the housing projects. They are target populations that may have little understanding of the skills needed to qualify for employment. Clearly, other considerations may also include “physical handicaps,” “language barriers,” “phobias,” or other deficiencies. Valid information is gained about a target population when the needs assessment methods appropriately suit the audience being assessed. For example, older adults with physical limitations may be unable to participate in a writing activity. The needs assessment, in this case, must minimize activities requiring acute dexterity or sight.

2) Coordination

¹⁸ For example see Knox, 2002, p.55; Pennington, 1980, p.6; Queeney, 1995, p.46; and Rouda & Kusy, 1995, p.255.

In most cases, consideration must be given to coordination of the needs assessment. Unless the assessment is modest in size, the primary responsibility should be assigned to a “needs assessment coordinator”. This task requires release time, “allocation of resources and assurances of cooperation” on behalf of all stakeholders involved in the needs assessment (Knox, 2002, p.49 and Queeney, 1995, p.51). Barbulesco (1980, p.77) states that coordination of a needs assessment may involve appointing a committee, “comprised of representation of staff, community, administration and clients.” Altschuld and Witkins (200, p.21) suggest that coordination of a needs assessment should be done by individuals external to the organization. In this way, their “specialized knowledge,” coupled with their objectivity would be cost effective, “especially if the needs assessment is politically sensitive.”

3 Resources

Early in the needs assessment process, it is a good idea to come up with a realistic determination of the funds, support personnel and services, expertise, facilities and equipment and any other resources needed to design, conduct and evaluate the needs assessment.

Quality planning is paramount to a successful needs assessment (Altschuld & Witkins, 2000, p.17 and Queeney, 1995, p.48). Needs assessments possess complex dimensions, because they take place in the “political and social environment of an organization” (Altschuld & Witkins, 2002, p.17). They are frequently based on information acquired from an array of constituencies and work best when key decision makers are dedicated to the endeavor. The needs assessment process can become political, especially when its focus is on public and controversial topics such as education, health care, social

services, urban planning, business and other areas (Altschuld & Witkins, 2000, p.17).

Consequently, the allocation of resources for one need over another can get political.¹⁹

Resources are finite, which demands careful consideration of all aspects of a needs assessment, and whether or not it is worthwhile.²⁰

According to Queeney (1995, p.48) the Continuing Education provider must consider the approximate funds needed for the assessment early in the planning process, so as to narrow the focus of the assessment if appropriate. Continuing Education providers usually initiate the opportunities for funding. An organization with a vested interest in a program may provide funds, or other groups with similar data needs may contribute funds to a joint assessment with the understanding that the assessment will be done collaboratively and the data collected will be disseminated to individuals that can use the findings. It is critical to know how much funding is available before a needs assessment is begun (Queeney, 1995, p.49). Queeney (1995, p.52) also states that the methods selected to conduct the needs assessment will determine the types of knowledge and expertise that is required by the assessors. Competencies in “general research methodology”, “population sampling”, “group process”, “survey research”, “instrument design”, “design of simulation exercises”, “data analysis”, “statistics and communication” can be useful and in some cases essential in doing a needs assessment (Queeney, 1995, p.53).

Finally, support staff are needed to carry out specific tasks such as “scheduling appointments and facilities”, “conducting interviews”, “facilitating focus groups and computerizing data analysis”. Specialized services such as videotaping of the assessment

¹⁹ Resource allocation by its very nature is often political.

²⁰ For example see Altschuld and Witkins, 2000, p.18; Gilmore, Campbell and Becker, 1989, p.32; Gupta, 1999, p. 32; and Queeney, 1995, p. 48.

and computerized scoring of large surveys may be required to implement and analyze the data in a needs assessment. Also, facilities and equipment needed to conduct a needs assessment range in size and cost and must be given budgetary consideration (Knox, 2002, p.51 and Queeney, 1995, p. 51-53)

4.) Complexity of a Needs Assessment

Ideally, the scope of the needs assessment takes into account complexity. Needs assessment can range from simple to complex. The complexity of the needs assessment can be determined by the methods used, the detail of the data and the way in which the data is collected, interpreted and used. Studies can involve a variety of data collection techniques and several people in the study. The complexity of a needs assessment is also influenced by sources of funding, size and skill of staff. A needs assessment study can be as simple as asking individuals what they believe to be their educational need or as complex as a lengthy survey of a major project funded by an external agency, staffed by a group of skilled researchers and support personnel (Pennington, 1980, p.8 and Queeney, 1995, p.56).

Sometimes, needs assessment can become complex for no reason. The simple straightforward needs assessment can usually accomplish what is needed to measure “unidimensional educational needs” such as “information gaps” in a target populations knowledge, “the availability of educational activities in a particular content area, scheduling preferences for a given audience, and the identification of underserved populations” (Queeney, 1995, p. 57).

5.) Ground Rules/Timeline

Basic ground rules are useful in a needs assessment as they pertain to “objectives,

resources, division of responsibilities, methods and access to and use of conclusions” (Knox, 2002, p50). Ground rules established early can help to answer such questions as “Who will have access to the data?”, “When can they have access?”, and “What can they use the data for prior to the completion of the study?” (Pennington, 1980, p.11) Understanding the rules can encourage cooperation throughout the assessment process and reduce misunderstanding.

Timing of the needs assessment should also be considered, as it can vary based upon the scope of the assessment. Whatever the size of the scope of the needs assessment, it is important to develop a realistic timeline for each phase of the process, and to provide for unanticipated delays, and recognize the importance of keeping the process moving forward to a successful conclusion (Knox, 2002, p.51).

Planning-Purpose: Determining What to Assess

The final component of the planning-purpose phase of the needs assessment is determining what to assess. This phase involves decisions that consider establishment of the Continuing Education providers priorities, identifying content area to be considered in the needs assessment and setting standards used to identify need.

1) Establishing Priorities

In Continuing Education, as well as other professions such as Human Resource Development, establishing priorities in conducting a needs assessment is usually done in view of an organizations goals, realities or constraints (Rouda & Kusy, 1995, p.256 and Queeney, 1995, p.63). Priorities are determined by considering whether the identified needs are real, if they are worth addressing and if the priorities reflect the needs and requirements of the organization.

2) Identifying Content Area

Sometimes, the priorities selected define the content areas to be considered in a needs assessment. More often however, the needs assessment is conducted to identify strengths and discrepancies within specific content areas, with the intent of providing educational activities that address the discrepancies. Commonly in Continuing Education, identifying content for educational programming is associated with Continuing Professional Education. For example, the scope of a practice within a particular profession consists of a number of specific tasks that make up the daily practice of those in that profession. The continuing educator can begin determining content area for the professional by outlining a full range of activities this target group does that are relevant to potential programming. Ideally, an ongoing assessment to identify all or most of the continuing education needs would eventually cover all content areas in the practice of that specific profession. Of course it is not advisable to conduct a needs assessment for each of these areas because cost and realism constrain the extent of content focused needs assessment (Queeney, 1995, p.68 and Rouda and Kusy, 1995, p.256).

3) Standards

According to Queeney (1995, p.86-87)

Need has no meaning without a defining standard, a level below which an individual or group is considered to fall short. A needs assessment participant who demonstrates knowledge, skills or performance abilities below the defined standard has not failed; rather the assessment has succeeded in revealing an area of potential educational need for that person (Queeney, 1995, p.86-87).

Barbulesco (1980, p.78) suggests that setting criteria for measuring need includes establishing standards that relate to desired, as opposed to current levels of knowledge, skills and abilities.

Data Collection and Analysis

The second phase of a needs assessment involves determining what data is to be collected, specifying the procedures to use for obtaining data, analyzing and interpreting the data, examining the causes of needs and making decisions relevant to the utilization of the needs assessment findings. Altschuld and Witkins (2000, p.27) refer to this phase of the needs assessment “as the engine that propels the needs assessment vehicle (i.e. new information, if mandated, is generated).” This information, in conjunction with the outcomes from the planning-purpose phase, helps the needs assessment team determine preliminary priorities for action planning in the utilization (third phase) of the needs assessment process. This phase is comprised of five components including indicators and sources of unmet educational needs, decisions concerning individual or group assessment, establishment of a needs assessment team, methodology selection and analysis of the data.

More specifically, the data collection and analysis phase of needs assessment consists of several components. Most needs assessments employ a systematic method of collecting data from individuals or groups in an effort to identify educational needs of potential participants (Barbulesco, 1980, p75 and Knox, 2002, p.55).

Knox (2002, p.55) suggests that one place to begin making decisions about the type of information or data to collect is by noting “indicators” or “symptoms,” which suggest that unmet educational needs may exist among the adults the continuing educator seeks to serve. Several sources of information about educational need can be tapped in a needs assessment study. Some are direct sources (potential participants) that can identify an educational need or express their views on the gap between current and desired proficiencies. In addition, instructors and experts who have useful information about the educational need or potential

participants are sources of information. Finally, there are indirect indicators of educational needs, such as reports and materials that address problem areas and trends that can reveal educational need. These sources may also include census data, professional publications, or information on trends in new technology or health issues (Barbulesco, 1980, p.75, Knox, 2002, p. 56 and Queeney, 1995, p.103).

Basically, needs assessment data gathering techniques fall under two categories and operationalize one or more methods. One model addresses unidentified educational needs and the other focuses on identified educational need (Barbulesco, 1980, p.75, Knox, 2002, p.56 and Queeney, 1995, p.94). Queeney (1995, p.93) states that “models of the first type are the most common.” Needs assessment that employs this model focuses on a specific audience in an effort to identify learning gaps that can be addressed by education. In this model the target audience is surveyed to discover where deficiencies exist. At this point, content areas are identified to determine which educational activities are needed. These assessments involve gathering data from knowledgeable and involved constituencies and inferring from their data what the issues, trends and societal needs can be enhanced through education (Barbulesco, 1980, p.75 and Queeney, 1995, p.93). For example, a review of student outcomes to identify discrepancies between actual and acceptable proficiencies in K-12 public education mathematics and science instruction is based on this type of model. The continuing educator can use the information from the assessment to define specific educational needs for both teachers and students.

Data collection techniques that utilize the identified need model are designed to determine the context in which the need exists and should be addressed (Barbulesco, 1980, p.75 and Queeney, 1995, p.94). This model often deals with issues such as “identification of

an audience for a proposed educational activity, or the level of education needed, and of optimum ways of delivering it” (Queeney, 1995, p.95). For example the Continuing Education provider would already know that front-line supervisors in a large manufacturing plant need management and supervisory development training. The needs assessment survey provides information on levels of knowledge among the supervisors, as well as their scheduling preferences.

Regardless of the model used, the validity of the needs assessment rests on its ability to produce valid and useable information that guides the planning process.

1) Individual or Group Needs Assessment?

Gilmore, Campbell and Becker (1989, p.131) offer a good example to explain the difference between individual and group needs assessment. Employees of Campbell Soup Company who participated in the Turnaround Program” survey engaged in an individual needs assessment. The survey was conducted to determine whether or not to establish the Turnaround Program, a “comprehensive preventive lifestyle management program” for Campbell Soup employees. Each employee who responded to the survey provided information pertaining to their “current attitudes and interests” of their workplace, information on age, sex, shift (work schedule) interest in commuting patterns, time most likely to participate in the (Turnabout) program, and use of community resources. This information gathered from the survey provided “valuable feedback on projected times of utilization and lifestyle programs that were used to tailor the program of the needs of the workforce” (Gilmore, Campbell and Becker, 1989, p. 132-136).

In contrast, members of a regional chapter of licensed social workers participate in an assessment of group needs when they respond to a questionnaire that gathers information about the discrepancies between current and desired proficiencies of their profession.

It is possible to assess the need of either the individual or an entire group, and “the two need not be mutually exclusive” (Queeney, 1995, p.96). Some needs assessment methods are more conducive to a group, but many can be used for both individuals and groups. “The same knowledge, skills and performance abilities can be assessed for both”(Queeney, 1995, p. 96). Queeney (1995, p. 97) posits that in individual assessment, continuing educators must ensure that participants don’t feel threatened by the assessment process, and are encouraged to view the assessment process as a strategy that will help them select educational activities. Individual assessments must be confidential, therefore it is best to report individual assessment results aggregately, making the results available only to the individual being assessed. Individual assessment is generally more costly than assessment of groups, because of the logistics and assessment methods employed. While group assessment can be compiled and reported in a single report, individual assessment requires a separate report generated for each participant.

Group assessment provides information that is potentially more useful than individual assessment because it provides information “on areas of educational need for broad populations” (Queeney, 1995, p.101). Group assessment may or may not include all members of the target group depending on the size of the population. If the target population is small in size such as clerical employees of a school district, assessment of the total population is feasible. For larger and more spread out or less identifiable populations, it may not be feasible to assess the entire population. In these cases it may be necessary to obtain an

accurate random sample as representative of the population and make generalizations to the total population. Sometimes, drawing a random sample may be impractical or too costly.

For example, the continuing educator that is trying to identify the educational needs of residents in a metropolitan area may only be able to do so with considerable expenditure. In this case, assessment of another type of sample would suffice. Queeney (1995, p. 101) puts it this way.

Group assessment data based on nonrandom samples can be used to determine whether there are enough potential participants with given needs to justify an initial offering of a program. However, any generalizations from assessment of this group to a larger population will not be valid because the group does not represent a random sample.

Table 3.2 provides examples of individual and group programming to illustrate the contingency nature of needs assessment. This table demonstrates the decisions made when assessing educational need. The Continuing Education provider must determine the type of continuing education program to offer, select the best methods for data analysis and determine whether to use the information gathered and move forward with planning for new educational programming.

Table 3.3 expresses how the beneficiary of the educational activity helps to determine whether to implement individual or group based data collection methods.

Table 3.2: Individual Versus Group Settings

Purpose	Data Collection	Use
<ul style="list-style-type: none"> ❖ Individual Learning ❖ Self Enrichment 	<ul style="list-style-type: none"> ❖ Individual Interview ❖ Survey Questionnaires ❖ Delphi Panel 	Provides information on programs that are relevant to the individuals needs, as well as information on delivery and scheduling preferences and how much they are willing to pay.
<ul style="list-style-type: none"> ❖ Community Learning ❖ Group Learning 	<ul style="list-style-type: none"> ❖ Survey Questionnaires ❖ Group Interviews ❖ Brainstorming ❖ Nominal Group 	Pinpoints respondents needs, what needs their organization or community has, what educational programs best meet their needs, what topics this program

		covers, when programming should occur and how much participants will pay.
<ul style="list-style-type: none"> ❖ Continuing Professional Education ❖ Career Development 	<ul style="list-style-type: none"> ❖ Tests ❖ Student Portfolios ❖ Face to face interviews with potential participants, informed individuals, subject matter specialists. 	Same as community and group learners, but face to face interviews provides perspective on what participants need for specific job situations.

Table 3.3: Characteristics of Potential Adult Students from Whom Data are Gathered

Client Characteristics	Methodology
Under-served or limited educational background	<ul style="list-style-type: none"> ❖ Individual or group interviews ❖ No questionnaires
Professionals	<ul style="list-style-type: none"> ❖ Telephone interviews
Groups working or living in close proximity or location	<ul style="list-style-type: none"> ❖ Group based approaches; group interviews, brainstorming or nominal group
Groups that are separated by distance	<ul style="list-style-type: none"> ❖ Telephone interviews ❖ Survey questionnaires

2) Needs Assessment Team

Proper needs assessment can be time consuming and require a variety of expertise. Hence, there is often the need for a team effort.²¹ Usually, two groups with different responsibilities comprise the needs assessment team. Individuals who provide guidance and advise is one group and the other are individuals who actually design and implement the needs assessment activities. Ideally, Continuing Education will have access to staff or consultants to help plan and conduct the needs assessment, but for those Continuing Education providers that work alone, the needs assessment is an individual activity. Gilmore, Campbell and Becker (1989, p.7) maintain that an assessment team should be “comprised of the professionals directly involved in the planning, coordination or facilitation of the needs assessment.” Conversely, Altschuld and Witkins (2000, p. 21) posit that as needs

assessments are political in nature, internal consultants may come with “organizational baggage” and biased in favor of one need over another. Hence, the needs assessment team should be comprised of external consultants hired to do the job. However, it is most likely that the cost involved in establishing a needs assessment team, whether internal or external to the organization will have to be taken into consideration early in the assessment process.

Data gathering requires attention to detail and often depends on considerable expertise that can be acquired through the needs assessment team. Data computation and interpretation are required, and those team members interpreting the data help the continuing educator to understand how discrepancies within the assessment can be translated into educational activities. Also, a report on the data and its implications can be used as a marketing tool for both internal and external institutional or organizational use.

3) Methods

Decisions about methods of data collection for a needs assessment usually means that one, and usually two or more methods for gathering data will be implemented.²² Most needs assessment methods have strengths and weaknesses, therefore the types of methods employed should be those that best relate to the program type, scope of the needs assessment, and clientele characteristics. Procedures for data collecting in a needs assessment are similar to those in the social and behavioral sciences, with some distinctive features. For each needs assessment, relatively few methods are selected from the many available. When data collection methods are selected the assessor must keep in mind the practical purpose of the

²¹ For example see Altschuld & Witkins, 2000, p.21; Barbulesco, 1980, p.76; Gilmore, Campbell & Becker, 1989, p.14; Moore, 1980, p.96; and Queeney, 1995, p.111.

²² For example see Altschuld and Witkins, 2000, p.49; Barbulesco, 1980, p.75; Gupta, 1989, p.16; Knox, 2002, p.68; Moore, 1980, p.96; Pennington, 1980, p.9; Penn State University Libraries: <http://www.libraries.psu.edu/crsweb/vius/section3.html>; Queeney, 1995, p.94; Rouda and Kusy, 1995, p.256; Sherry & Morse, 1995, p.7; and Swist, 2001 at http://www.amxi.com/amx_mi30.htm.

needs assessment, especially encouraging use of the findings. Obtaining early clarification of the sources and population from which data are to be sampled and collected can facilitate the needs assessment. Also, the cooperation of stakeholders (those with a vested interest in the assessment findings) as well as the needs assessment team is essential. Consideration must also be given to how large and representative the sample is, or how a questionnaire or interview may be worded (Babbie, 1998, Knox, 2002, p.59 and Queeney, 1995, p.107).

Human needs are diverse and changing, and there is no single approach to assessing them. Often a combination of quantitative and qualitative data is useful. Quantitative data, such as test scores and rating scales allow for comparison and easy summarization while qualitative data, such as interview responses and comments to open-ended questionnaires and focus groups, can answer the why questions of a needs assessment, and suggest how to use conclusions with regards to the quantitative data.²³

Although there are many ways to collect data, the commonly used methods are interviews, focus groups, surveys, questionnaires and observation.²⁴ Other methods include nominal group and Delphi Panel, committees, “consultation,” “consensus-rendering techniques,” “work samples, records and documents”, self-evaluation, performance observation, simulations and secondary data.²⁵

4) Analysis

Often, little attention is devoted to what happens once the data is collected (Moore,

²³ For example see Gilmore, Campbell, and Becker, 1989, p.8; Knox, 2002, p.66; and Queeney, 1995, p.109.

²⁴ For example see Altschuld and Witkins, 2002, p.76; Gupta, 1989, p.16; Knox, 2002, p.65; and Queeney, 1995, p.110-111.

²⁵ It is beyond the scope of this research project to provide details for each of these methods. However, before a discussion on analysis of the data, it is important to point out that multiple methods should be used in a needs assessment, for purposes of triangulation. The methods complement each other so that one technique will fill in the data that the other method may be unable to provide. See for example Altschuld & Witkins, 2000, p. 85; Knox, 2002, p.66; and Queeney, 1995, p. 89.

1980, p.96 and Queeney, 1995, p.200). Data analysis is the judging and comparing of one set of data against another, to produce a compilation of meaningful information. Altschuld and Witkins (2002, p.89) put it well stating that the data collected from a needs assessment has no value until it is “synthesized into a useable body of information for making needs-based decisions and for developing programs to resolve the identified need.”

There are several ways to analyze needs assessment data. The most appropriate procedure will depend on the type of data collected and the purpose of the needs assessment. For example, when deciding on a topic for an annual program for a familiar client, a committee may convene and find a summary of comments on a questionnaire that would provide a listing of possible topics. By contrast, the Continuing Education provider that wishes to move into new territory with regard to content, methods and potential adult learners, may find it worthwhile to take different types of data that have been analyzed and take their conclusions to find common themes or categories. Examples may include trends from recent publications that have been analyzed. Determining potential topics on a questionnaire by major subpopulation of potential participants based on a frequency distribution of the questionnaire may reveal potential categories for education activities. Information that stands out in telephone interviews with experts and instructors in a particular field, or a detailed summary of a pilot educational program may represent still another set of themes from which to develop educational activities. (Babbie, 1998 and Knox, 2002, p.67).

Altschuld & Witkins, (2000, p.78) Knox (2002, p.68 and Queeney (1995, p.200) maintain that for quantitative data (test scores and rating scales) a frequency distribution is usually run early in the analysis phase. “There is typically some effort to verify that scores

correspond to the phenomenon (knowledge, skills, attitude, performance, influence) that the scale or test is intended to assess” (Knox, 2002, p.68). After such preliminary analysis, it is typical to conduct cross-tabulation analysis by comparing frequency of response for several categories of respondents. For more complex analysis, there are forms of multivariate analysis of statistical data.

For qualitative data, an early analysis stage is to make a classification of responses by reading through related data to reveal categories from the data. These categories can be used for coding themes. By identifying themes from the qualitative data, a working hypothesis can be developed and tested (Altschuld & Witkins, 2000, p.79, Knox, 2002, p.69, Queeney, 1995, p.201 and Shields, 2002, p.72-73).

The depth and complexity of data analysis depends on how well the existing unmet educational needs are understood, and the price of program failure. It may be that the best approach is to simply proceed with a program on a small scale and use evaluation to improve the program and make subsequent changes.

Utilization

Utilization of the needs assessment is the third major category of the practical ideal model developed in this research project. It is essential for Continuing Education providers to report and use the findings from a needs assessment.²⁶ Without doing so, it is difficult to get cooperation from stakeholders to conduct future assessments.²⁷ It is also a good idea to disseminate the needs assessment findings to individuals who would use them. Below is a guideline Patton uses for reporting needs assessment findings.

²⁶ For example see Altschuld and Witkins, 2000, p.235; Barbulesco, 1980, p. 79; Gupta, 1999, p.129; Knox, 2002, p.72; Moore, 1980, p.97; Pennington, 1980, p.12; and Queeney 1995, p.221.

²⁷ The major justification of a needs assessment is to use the information gathered from the needs assessment in guiding program development and implementation.

Table 3.4 Patton’s Guidelines for Reporting Needs Assessment Findings

▪ Involve stakeholders in the process.
▪ Hold early interpretation sessions to increase utility, facility with data analysis, realistic expectations, and commitment to use findings.
▪ Establish standards early to guide interpretation and reporting.
▪ Make the analysis and reporting process interesting for stakeholders.
▪ Help stakeholders separate reporting regarding analysis, interpretation, judgment, and recommendation.
▪ Organize and focus reporting so that stakeholders can deal with the report.
▪ Offer balanced conclusions that reflect multiple indicators and interpretations
▪ Make sure that comparisons are sound.
▪ Use multiple process and content reporting strategies to address various stakeholder interests and capabilities.
▪ Help stakeholders assess findings regarding understanding, ability, relevance, believability, accuracy, practicality and utility with stakeholders.
▪ Plan strategies for utilization by intended users and perhaps dissemination to additional audiences.
▪ Develop recommendations carefully so they will be taken seriously” (Patton, 1997 in Knox, 2002, p. 71).

The type of involvement Patton describes in his list encourages stakeholders to use the findings when making future programming decisions. Needs assessment findings may also be beneficial to individual audiences, such as “policy makers or funders that can strengthen their support because of increased appreciation of the needs that a program addresses” (Knox, 2002, p. 72).

Implementing the findings of the needs assessment is the stage in which action is taken and in which new course offerings, course changes and other adjustments are made. Barbulesco (1980, p.76) suggests that it is where the “needs assessment cycle ends and begins again.” Pennington (1980, p.10) states that needs assessment is a “transitional process from the present to the future.” Needs assessments are an attempt to systematically identify the educational gap between what is and what ought to be. Results from needs assessment studies provide a “baseline data for making summative judgments regarding program impact and planning data for projecting alternative mechanisms to reduce the gap between current

and desired circumstances” (Pennington, 1980, p.11). This development quality of needs assessment personifies the importance for Continuing Education providers to understand the major concepts about adult development and can help Continuing Education practitioners

anticipate the educational needs of adults undergoing major role changes, for example, and to reflect this understanding in efforts to attract people with heightened readiness to learn, in relevant instructional activities, and in evaluation activities for assessing program impact on performance (Pennington, 1980, p.11).

At this point, the components within a comprehensive needs assessment model have been established. The next step is to get feedback from Continuing Education providers and professionals engaged in needs assessment, in an effort to validate and refine the model. The next chapter operationalizes the conceptual framework developed for this project.

This chapter also discusses the research methodology used for collecting the needed data.

CHAPTER IV

CONCEPTUAL FRAMEWORK AND METHODOLOGY

The purpose of this chapter is to link the literature with the research question through the conceptual framework and then to discuss the methodology used to address the research question. Three major components of the ideal needs assessment model have been identified. A practical ideal type conceptual framework has been utilized in this research. From a public administration perspective “practical ideal types can be viewed as standards or point of reference.”²⁸

The chapter first discusses the framework itself. Tables 4.1 and 4.2 depict the framework. The methodology section of the chapter then operationalizes the conceptual framework (or describes how the framework is used to develop a practical ideal model for

²⁸ “In public administration, outcomes can be difficult to measure. As a result, standards associated with service delivery are often developed as assessment mechanisms. Practical ideal types provide benchmarks with which to understand (and improve) reality” (Shields, 2001, p.61).

needs assessment in Continuing Education) before addressing the strengths and weaknesses of survey research.

Conceptual Framework

The conceptual framework of this research was developed from the literature discussed earlier (Tables 4.1 and 4.2) that advances the use of needs assessment in Continuing Education. From the literature practical ideal categories were developed to aid in gauging the best model for Continuing Education providers to follow when conducting a needs assessment. The conceptual framework is first discussed and then followed by an explanation of the methodologies used to validate the needs assessment model.

Table 4.1: Abridged “Ideal” Needs Assessment Model

Practical Ideal Categories	Sources
I. Planning-Purpose	- Altschuld& Witkins, 2000
II. Data Collection & Analysis	- Barbulesco, 1980
III. Utilization of Needs Assessment	- Cassara, 1980
	- Gilmore, Campbell & Becker, 1989
	- Gupta, 1999
	- Houle, 1972
	- Knox, 2002
	- Moore, 1998
	- Moore, 1980
	- Pennington, 1980
	- Queeney, 1995
	- Rouda & Kusy, 1995
	- Sherry & Morse, 1996
	- Swist, 2001

Planning-Purpose

Specifying A Needs Assessment Purpose

Deciding to conduct a Continuing Education needs assessment requires consideration of several issues. This involves the recognition of a need or problem and “the decision to use a needs assessment study as a means to explore the desirability of a continuing education

program (Barbulesco, 1980, p.76). The **purpose** for a needs assessment generally includes 1) focusing on the content of an educational activity, 2) identifying potential audiences and 3) determining the merits of existing programs (Queeney, 1995, p.29). The **purpose** for a needs assessment is often guided and even governed by **institutional mission, goals, strengths, priorities or even politics** (Knox, 2002, p. 45 and Queeney, 1995, p. 30). Specifying the **purpose** of a needs assessment forces the Continuing Education provider to focus on issues such as **content areas, level of educational need, under-served populations requiring specific educational needs, target populations for specific educational needs and delivery and scheduling preferences of adult learners.**

Scope of Needs Assessment

The Continuing Education provider must understand the extent or **scope of the study**, and answer “Who’s needs are being assessed?” “Who should be involved in the process?” and “Who should use the data collected from the study?” In addition to issues about target populations, coordination and involvement of stakeholders, consideration must also be given to management of the process including **time, resources, tasks and expertise or talent** required to conduct the study, along with **estimated costs and timelines.**²⁹ The needs assessment process also assumes that the decision to conduct the study reflects the resources and procedures or methods required to carry out the process. **Standards should be set and ground rules should be clarified** to enhance cooperation among those involved in

²⁹ For example see Barbulesco, 1980, p. 77; Knox, 2002, p. 46; Queeney, 1995, p. 37; Witkins & Altschuld, p.11, 1995; and Witkins & Altschuld, p.10, 2000.

the process. A pilot project may be required to ensure feasibility of the needs assessment.

Involvement of stakeholders will also help strengthen the needs assessment process.³⁰

Determining What to Assess

A needs assessment focuses primarily on identifying and clarifying areas of educational need. At first glance, a needs assessment may seem a simple task. However, factors such as **establishing priorities, identifying educational content areas, and setting standards for the needs assessment** are considerations essential to the process.³¹ Without careful consideration of these factors, the data collected from the assessment may be of little or no value (Queeney, 1995, preface xvii).

Data Collection and Analysis

Data collection and analysis of a needs assessment consists of developing a plan and selecting strategies to use in a needs assessment that answers questions like “what specifically are we doing?” and “in what order?” and “when?” (Barbulesco, 1980, p.76 and Moore, 1980, p.96) A well constructed, implemented and interpreted needs assessment is the first step in developing educational activities that will meet the needs of a target population as well as meet the educational programming objectives of the Continuing Education provider (Queeney, 1995, p.93). “Usually, writings about needs assessment tend to focus on the type of information or data to collect and the procedure for data collection and analysis (Knox, 2002, p.5)” A place to begin the data collection process is to consider **indicators** or “apparent difficulties” of unmet educational needs (Barbulesco, 1980, p.78). There are three

³⁰ For example see Barbulesco, 1980, p.77; Knox, 2002, p.76; Pennington, 1980, p.7; and Queeney, 1995, p.50.

primary sources of data for educational needs assessment. The first is **potential participants** that provide the Continuing Education provider with information about their views on discrepancies between current and desired proficiencies (Knox, 2002, p.55 and Moore, 1980, p.96). The second is other **individuals such as experts, instructors, administrators, policy makers and professionals** who have knowledge about the educational needs of potential participants. The third is **existing records such as documents and reports** that address problem areas and societal and political trends related to adult learners. Examples of some of these are **census data and reports or data related to the family, community, health and occupation of adult learners.**³²

Individual or Group Needs Assessment and Method Selection

Several methods to collect data about educational needs of adult learners are available and each is characterized by a “step-by-step process that operationalizes one or more methods” (Queeney, 1995, p. 93). The Continuing Education provider must decide upon the group to be assessed. Either **individuals or an entire group can be assessed. Some methods are best suited for group assessment, but many can be used for individual and group assessment.** Factors such as the varying range of content areas and educational levels of different populations, the changing needs of specific groups over time, changing organizational objectives and availability of resources will affect the methods utilized for needs assessment data collection. Therefore, it is impossible to identify a single needs assessment method that will work for all individuals or groups. **Most studies rely on one or more methods** (Moore, 1980, p. 96 and Queeney, 1995, p.107). **A combination of**

³¹ For example see Barbulesco, 1980, p.79; Queeney, 1995, p. 61; Witkins & Altschuld, p.11; 1995 and Witkins & Altschuld, p.10, 2000.

³² For example see Knox, 2002, p.56; Moore,1980, p. 96; Pennington, 1980, p. 7; and Queeney, 1995, p.90.

techniques will be needed to obtain “valid, valuable and relevant information, and to allow for **cross-validation and encourage use of conclusions** (Knox, 2002, p. 75).” Also it is essential that existing, as well as **qualitative and quantitative data** are utilized (Knox, 2002, p.77 and Queeney, 1995, p. 232).

Assessment Team

After deciding on the target group to assess and determining the appropriate assessment methods, an **assessment team must be convened** to ensure a smooth needs assessment process from beginning to end. After the Continuing Education provider has done this, the actual needs assessment process may begin.

Analysis

Analysis procedures will vary in a needs assessment based upon the type of data and purpose of the assessment. A successful needs assessment will provide different topics that the Continuing Education provider can specify educational need, and also reduce the risk of program failure due to unresponsiveness (Knox, 2002, p.76). Queeney (1995, p.200) states that **data analysis can “range from simple summaries of comments offered by focus groups to computerized statistical analysis of information collected in a survey.**

Whatever the analysis procedure, **data analysis is an integral part of a needs assessment as it compiles the data into meaningful information that will point to knowledge, skill or performance ability discrepancies.** Careful interpretation of the data will allow the

Continuing Education provider to integrate the data with other relevant information to produce topics that can be translated into educational programs.³³

Utilization

Utilizing the findings from the needs assessment is a major justification for conducting the needs assessment. The information gathered from the needs assessment guides program development and implementation.

For most needs assessment, **coordination** and management of the process is the responsibility of one or more individuals. Someone should be designated to **coordinate the planning and implementation of data collected and analyzed**. The findings of the assessment should be available to all **stakeholders** involved in the process and **stakeholders should be encouraged to utilize the findings report** (Altschuld & Witkin, p. 31, 2000 and Knox, 2002, p.71). Knox (2002, p.77) state that without use of the findings “it becomes difficult to obtain cooperation for future assessment.”

Queeney (1995, p. 215).states that needs assessment provides a first step in the program planning process and “the information to guide the continuing educator in defining the content and target population for educational activities; determining when, where, and how those activities should be delivered; and in choosing the most effective way to promote them. Complete, accurate interpretation and reporting of needs assessment data are critical for their full exploitation and use.

Pennington (1980, p. 10) state that needs assessment is a “transitional process from the present to the future.” Needs assessment systematically attempt to observe current proficiencies with desired proficiencies. Results from a needs assessment can provide

³³ For example see Barbulesco, 1980, p.78; Knox, 2002, p. 77; Moore, 1980, p. 96; Pennington, 1980, p.10; and Queeney, 1995, p.211.

“baseline data for making summative evaluation judgments regarding program impact,” and planning data for identifying different ways to reduce the gap between “current” and desired” educational needs (Knox, 2002, p. 76 and Pennington, 1980, p. 11).

Finally, evaluation of continuing education activities can be as simple as examining the financial success of a program. However, Continuing Education providers that are serious about the quality of their programs will welcome evaluation as a means to learn about the effectiveness and impact of their educational activities. In this way, evaluation can be viewed as a needs assessment for the Continuing Education provider, pointing out the positive and negative aspects of their educational activities. Evaluation viewed this way can only be valid if done on a continuous basis. The value of a needs assessment is diminished if its’ findings are not shared by those that will derive the most benefit (Palomba and Banta, 1999, p. 15). Palomba and Banta (1999, p. 15) espouse that “assessment should be regularly reexamined. “Assessment should occur throughout the process, not intermittently.” Assessment is a **continuous** process.

Table 4.2 shown below, summarizes the “expanded” or detailed conceptual framework for a comprehensive needs assessment model for Continuing Education (this model is also referred to as the conceptual framework). The table demonstrates how the framework was built using the literature. Column one lists the sources used and column two details the components of the model.

Table 4.2: Linking “Expanded” Model to Literature and Questionnaire

Sources	Practical Ideal Categories	Survey Items
<ul style="list-style-type: none"> - Altschuld& Witkins 2000 - Barbulesco, 1980 - Cassara, 1980 - Gilmore, Campbell & 	<p>I. Planning-Purpose*</p> <p>A. Specifying A Needs Assessment Purpose</p> <ul style="list-style-type: none"> - Guided by mission, priorities, politics - Content areas - Level of educational need 	<p>Questions 3-8.</p>

Methodology

Developing and testing a conceptual framework based on a practical ideal model appropriately addresses the research question of this project. Practical ideal models are particularly appropriate for use in gauging and exploratory research (Shields, 2001, p. 73).

In this research project, the practical ideal model is used as a point of departure to validate and refine the model. Both survey questionnaires and interview questions are used to gauge the appropriateness and usefulness of the model developed for needs assessment in Continuing Education, and to get feedback on the model from Continuing Education providers and professionals that are experienced in needs assessment. The model developed above was used to construct the survey instrument. Table 4.2 summarizes the connection between the model and the survey instrument.

Survey research is the primary method of collecting data on the comprehensive needs assessment components in Continuing Education. Qualitative data is acquired from responses to structured interview questions as a secondary method of collecting data and are translated into classification of data that is used to organize and code categories of themes derived from the interview responses. The advantage to this process allows for reviewing of data to identify similar categories of themes forming a practical ideal model (Knox, 2002, p.69 and Shields, 2002, p.59-61). The structured interviews serve to cross validate the survey research and to increase validity and reliability of results.

Responses from the survey questionnaires and interviews will help the researcher to understand the strengths and weaknesses of the model and to prioritize the components within the model.

Research Methods

Survey Methodology

The preliminary framework was transformed into a questionnaire that is posted on the Southwest Texas State University, Office of Continuing Education website at http://www.continuing-ed.swt.edu/programs/needs_assessment_survey.html

A survey questionnaire was emailed to all UCEA members. Table 4.2 (above) links the needs assessment model to the literature and the survey questionnaire. Columns one and two summarize the model. Using the framework, the questions in column three were designed, which also directly links to the framework in column two. See Appendix A for the completed survey questionnaire. The questionnaire consisted of 30 questions. A five-point Likert scale was used for the ratings from “Strongly Agree”, to “Strongly Disagree”.

Survey data is appropriate for this study because it permits for data collection of Continuing Education deans/directors throughout the United States. As the survey is going nationwide, findings that are significant should be more valid. The use of survey research is also appropriate for this project because the research is gauging in nature (Shields, 2001, p. 73). Survey research provides for flexibility in the questioning process (Babbie, 1998, p. 273). Ideally, an increase in the number of respondents to the survey would lessen the risk of not obtaining enough relevant data, in which case, telephone interviews were conducted that provided enriching and insightful feedback that further validated the practical ideal model.

The population of this research includes 1552 University Continuing Education Association (UCEA) members. This population was selected because it represents deans and directors of Continuing Education units within the United States.

Structured Telephone Interview Methodology

Structured telephone interviews are conducted to allow for cross-validation of the survey results. The telephone interviews supplement the survey by adding both depth and validity.

Donna Queeney author of *Needs Assessment in Continuing Education* was contacted by email. Queeney suggested that the researcher contact fellow colleagues in Continuing Education that will identify other deans/directors of Continuing Education and write them a letter, of which the entire mechanics would be handled by the researcher, indicating that they would appreciate their participation in the researchers' study. The finalized telephone interview questions were attached behind a cover letter and sent to the respondents identified by the researchers' Continuing Education colleagues, requesting a telephone interview on a specified date in the letter. As the survey questionnaire was administered through the website of the Office of Continuing Education at Southwest Texas State University, receiving responses to the questionnaire took approximately two weeks, while the telephone interviews took a total of three weeks to conduct.

As in the survey questionnaire, the structured telephone interview questions correspond with each practical ideal category shown in Tables 4.3 and 4.4. Table 4.3 represents the major categories of the Continuing Education needs assessment, while Table 4.4 provides specific components within each broad category.

Table 4.3: Operationalizing the Conceptual Framework: Abridged Interview Model

Practical Ideal Categories	Research Methods	Evidence
I. Planning Purpose II. Data Collection & Analysis III. Utilization of Needs Assessment	Structured Telephone Interviews	What are the major components in a needs assessment model? What are the strengths and weaknesses of the abridged needs assessment model?

Table 4.4: Operationalizing the Conceptual Framework: Expanded Interview Model

Practical Ideal Categories	Research Methods	Evidence
<p>A. Specifying A Needs Assessment Purpose</p> <ul style="list-style-type: none"> - Guided by mission, priorities, politics - Content areas - Level of educational need - Understanding educational needs of under-served populations - Targeting populations for specific educational need - Delivery and scheduling preferences - <p>B. Scope of a Needs Assessment</p> <ul style="list-style-type: none"> - Target populations - Coordination - Resources - Level of complexity - Standards - Timeline <p>C. Determining What to Assess</p> <ul style="list-style-type: none"> - Setting priorities - Identifying content areas - Setting standards 	<p>Structured Telephone Interviews</p>	<p>Based on the literature the first phase of a needs assessment typically has to do with “planning,” understanding the purpose of the needs assessment and is “exploratory” in nature. (Altschuld & Witkins, 2002)</p> <p>a. What components do you think belong in the first phase of a needs assessment?</p> <p>b. What are the strengths and weaknesses of the “planning purpose” phase of the needs assessment model?</p>
<p>II. Data Collection & Analysis</p> <ul style="list-style-type: none"> - Indicators and sources of unmet educational needs - Individual versus group assessment - Assessment team - Selecting methods - Understanding various methods - Combining techniques - Utilizing existing data - Utilizing quantitative and qualitative data - Analysis 	<p>Structured Telephone Interviews</p>	<p>Based on the literature the second phase of a needs assessment typically has to do with gathering data or data collection and analysis.</p> <p>c. What do you feel are the components that belong in the second phase of a needs assessment?</p> <p>d. What are the strengths and weaknesses of the “data collection and analysis” phase of the needs assessment model.</p>
<p>Utilization of Needs Assessment</p> <ul style="list-style-type: none"> - Coordination - Stakeholders use of data conclusions - Baseline data - Continuous assessment/evaluation 	<p>Structured Telephone Interviews</p>	<p>Based on the literature the third phase of a needs assessment typically has to do with utilization of the needs assessment findings.</p> <p>e. What do you feel Are the components that belong in the</p>

	<p>third phase of a needs assessment?</p> <p>f. What are the strengths and weaknesses of the “utilization” phase of the needs assessment model?</p>
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Statistics

Statistical results collected include simple descriptive statistics of quantitative data including mode and percentages. Qualitative data was derived from the interviews with both positive and negative comments reviewed and presented.

Summary

This chapter provided an overview of the research methodology used in collecting data on the ideal needs assessment model. The sample and operationalization for the research was also discussed. The next chapter presents the overall results of the data analysis.

CHAPTER V

RESULTS

INTRODUCTION

The purpose of this chapter is to validate and refine the practical ideal model for needs assessment in Continuing Education units within institutions of higher learning. This model was developed in Chapter III. Evaluation of the needs assessment model in Continuing Education units is based on quantitative responses received from the electronic survey instrument (Appendix A), as well as the qualitative assessment of telephone interview responses by the researcher (Appendix B).

The overall results of the survey overwhelmingly validated the needs assessment model. This is evidenced by the fact that cumulative findings indicate that every identified major component and, with one exception, every sub-component within the proposed needs assessment model was found to be important. Of the three major components in the model, two of the responses were “strongly agree” and the other “agree.” Of the twenty-six sub-components the modal response was “strongly agree” or “agree” with one “neutral” response (Table 5.10).

Although the results of the telephone interviews were more critical of the model, respondents provided great depth and richness of opinion concerning the model.

COMPREHENSIVE NEEDS ASSESSMENT MODEL IN CONTINUING EDUCATION

PLANNING-PURPOSE

In evaluating the first component of the proposed needs assessment model, *Planning-Purpose*, two questions were asked. First, respondents were asked if *Planning-Purpose* represents the first phase of the needs assessment model and should this phase include a) *specifying a needs assessment purpose*; b) *scope of a needs assessment*; and c) *determining what to access*.

Survey

Table 5.1 indicates that 94% of the respondents strongly agree that *Planning-Purpose* is the first phase of a needs assessment. Table 5.2 illustrates that 91% of respondents strongly agree that a) *specifying a needs assessment purpose*, b) *scope of the needs assessment*, and c) *determining what to assess* comprise the sub-components under the *Planning-Purpose* phase of a needs assessment.

Table 5.1: Cumulative Survey Results to Planning-Purpose Phase of Model

Survey Question n= 86	% Yes	Mode
The planning purpose phase of a needs assessment in continuing education should represent the first phase of the assessment and include: a) specifying a needs assessment purpose, b) scope of the needs assessment, and c) determining what to assess.	94	Strongly Agree

Table 5.2 Cumulative Survey Results of Components in Planning-Purpose Phase of Model

Survey Question n = 86	% Yes	Mode
The planning purpose phase of a needs assessment in continuing education should represent the first phase of the assessment and include: a) specifying a needs assessment purpose, b) scope of the needs assessment, c) determining what to assess.	91	Strongly Agree

The respondents were asked to rate the three subcomponents within the *Purpose-Planning* phase. Table 5.3 indicates the importance of the five subcomponents under *specifying a needs assessment purpose*. Table 5.4 represents the importance of the six subcomponents under *scope of a needs assessment* and Table 5.5 illustrates the importance of the three subcomponents under *determining what to access*.

Specifying a Needs Assessment Purpose

The vast majority of the eighty-six respondents felt that *specifying the purpose of a needs assessment* was important, agreeing to all six of the sub-components (see Table 5.3). Interestingly, sixty-four (75%) of the respondents agreed that *identifying the potential students level of education* was an important aspect of specifying the purpose of a needs assessment, but still eighteen (21%) of the respondents had a “neutral” opinion (See Appendix A). Also, 70% of the respondents agreed to the notion that the needs assessment purpose should consider the *educational needs of under-served student populations*, and yet

nineteen (22%) felt no opinion about this sub-component (see Appendix A). These “neutral” responses diminished the importance of these two subcomponents.

Table 5.3 Cumulative Survey Results of *Specifying a Needs Assessment Purpose*

Survey Questions	% Strongly Agree & Agree	No. of Responses	Mode
Specifying a needs assessment purpose should:			
a. be linked or guided by the parent institutions’ mission, priorities, politics, etc.	87	86	³⁴ Agree Plus
b. focus on content areas specific to a profession or activities unique to a particular group.	81	84	Agree Plus
c. identify the potential students levels of education.	74	86	Agree
d. consider the educational needs of under-served populations.	70	86	Agree
e. capitalize on the institutions’ unique expertise in an effort to target populations.	80	84	Agree Plus
f. take into account the program delivery mode and scheduling preferences of potential students.	81	86	Agree Plus

The Scope of the Needs Assessment

Overwhelmingly, the respondents felt that an essential part of conducting a needs assessment involved *determining the scope of the needs assessment*, with respondents agreeing to all six sub-component (see Table 5.4 below). In particular, respondents felt that *establishing a set of ground rules* to follow while conducting a needs assessment was vital.

³⁴ Although not in the ninetieth percentile range, “Agree Plus” responses were still considered high ratings, ranging between eighty to eighty-nine percent.

Of the total eighty-four responses to this question, 91% “strongly agree” to the importance of established ground rules while conducting a needs assessment.

Table 5.4 Cumulative Survey Results of *Determining the Scope* of a Needs Assessment

Survey Questions	% Strongly Agree & Agree	No. of Responses	Mode
The scope of a needs assessment should:			
a. determine which target populations to assess.	94	83	Strongly Agree
b. engage a coordinator to manage the effort and keep it moving forward.	80	85	Agree Plus
c. seriously consider the resources available to conduct the assessment.	95	85	Strongly Agree
d. contemplate the level of complexity of the needs assessment.	88	83	Agree Plus
e. establish a set of ground rules to follow while conducting the needs assessment.	91	84	Strongly Agree
f. include a realistic timeline for each stage of the needs assessment.	98	85	Strongly Agree

Determining What to Assess in a Needs Assessment

The majority of the respondents agreed that *determining what to assess* in a needs assessment is also an important component in the *Planning-Purpose* phase of the needs assessment. Of the three sub-components, 93% of the respondents strongly supported the establishment of priorities so that the focus of the needs assessment is on identifying and clarifying areas of educational need (see Table 5.5).

Table 5.5: Cumulative Results of *Determining What to Assess* in a Needs Assessment

Survey Questions	% Strongly Agree & Agree	No. of Responses	Mode
Determining what to assess in a needs assessment should include			
a. establishing priorities so that the focus of the needs assessment is on identifying and clarifying areas of educational need.	93	85	Strongly Agree
b. identification of the strengths and weaknesses of particular programming content areas.	78	85	Agree
c. setting criteria or standards that measure levels of needs.	77	82	Agree

Telephone Interviews

In contrast, respondents to the telephone interviews were more critical of the model and offered perspectives that were reflective of personal experiences in conducting needs assessments. (Appendix B is a list of the interviewees). Of the seven interviews, one respondent suggested that the first phase, *Planning-Purpose*, be separated, comprising the major components of a needs assessment as:

- Purpose
- Planning
- Data Collection and Analysis
- Utilization of the Needs Assessment

Another interviewee felt that the model should be implemented in a specific project, and suggested that a case study of a project in the field of health or education would better validate the model. One, quite knowledgeable in needs assessment, began by suggesting that the researcher “not be afraid” to state the needs assessment concepts clearly so as to not “distill the meaning” of the components. As a matter of fact, this interviewee reconstructed the model for the benefit of the researcher. Table 5.11 is the revised model according to this respondent. This same respondent also suggested that if there were time,

employing the Delphi Panel technique to test the needs assessment model would provide useful feedback. One respondent with both public and private experience noted that throughout each major category of the needs assessment model the question needs to be asked, “Where are we now (current state of circumstances) and where do we want to be (desired state of circumstances)?” Furthermore, the needs assessment team must be aware of whether or not a “need” exists and must begin the needs assessment process by defining that need.

Overall, respondents agreed that *Planning-Purpose* was not only the first phase of the needs assessment, but a vital part of the process. Furthermore, most interviewees seemed to resonate to the value of a needs assessment model “grounded” in research.

The seven interviewees shared varied perspectives on the three sub-components of the *Planning-Purpose* phase of the needs assessment model. However, the element receiving the greatest dialogue was on the *scope of a needs assessment*.

Specifying Needs Assessment Purpose

One of the common themes within *specifying a needs assessment purpose*, and a concept not found in the literature was the notion that identifying “opportunities” as well as the “need” for a needs assessment study was an important consideration in the purpose of a needs assessment. One other prevailing theme respondents considered important in this sub-category was the idea that in the process of uncovering the *level of educational need or the unmet educational need of the potential student*, the assessor must be careful not to raise the expectations of the potential student. Interviewees remarked that while observations or face to face interviews are being conducted to determine the educational needs of the potential

student, this may mislead the students into thinking that their expressed needs will be transformed into an educational activity.

Other suggestions were that “milestones” should be added to this sub-component of the model. Milestones should represent significant developments in the needs assessment process, and help to answer questions such as “Where do I want to go?” “How do I get there?” “How do I know when I have been there?”

One seasoned respondent who has conducted needs assessment in the United States, South America and South Africa pointed out the importance of identifying the end use of the data. In her words, “What will the data be used for?”

Scope of a Needs Assessment

In keeping with the survey results, the telephone interviews contributed greatly to this sub-component of the model. Four of the seven respondents suggested that the *assessment team* component belonged in this sub-category. The notion was that an assessment team should be a consideration made earlier in the process and moved from the *Data Collection and Analysis* component into the *Scope of the Needs Assessment* sub-component. The respondents also felt that the *assessment teams*’ “buy-in” on the needs assessment would help to validate the entire process. One respondent maintained that the *assessment teams* must be “kept on track.” By this she meant that the personal desires of one or more team members must be kept in check so that the original needs assessment purpose does not change. Two respondents stated that the needs *assessment team* must be cautious about the “gaps” learned from the needs assessment and must consider if the educational activities developed to address these gaps are in keeping with the role of that particular Continuing Education department. “If not, Continuing Education should be prepared to let it go and concentrate its’

resources only on those educational activities that they can effectively handle.” Lastly, another respondent stated the *needs assessment team* had to be willing to accept the needs assessment results and “implement programming appropriately based on the needs assessment findings.”

Several suggestions were offered by one respondent. 1) “Criteria” needs to be included in this sub-category. Criteria is meant to answer the question “How do I know when I’ve addressed the gap?” 2) Resources should be considered “up front at the beginning of the needs assessment process.” 3) “Coordination is crucial.” Those conducting the needs assessment are “dealing with different cultures.” “The CEO culture, the engineering culture, and those in the trenches culture must all be coordinated in the assessment process. All of their input is useful and necessary.” 4) Finally, she suggested expanding the *level of complexity* sub-component to include “system readiness, system capacity for change and individuals’ perceptions of the change within the system.”

Determining What To Assess

One respondent addressed this aspect of the needs assessment model in such a comprehensive way, that Table 5.11 was created to illustrate how this respondent would not only change this sub-component of the model, but other elements in the entire model (see Table 5.11).

DATA COLLECTION AND ANALYSIS

Data Collection and Analysis comprises the second phase of the needs assessment model according to the literature. Respondents were asked if this indeed was the second

phase of a needs assessment, and to evaluate the seven sub-components within the *Data Collection and Analysis* phase of this model.

Survey

Table 5.6 indicates that 85% of eighty-two respondents felt that *Data Collection and Analysis* was the second phase of a needs assessment.

Table 5.6: Cumulative Survey Results to *Data Collection and Analysis* Phase of a Needs Assessment Model

Survey Question n=82	% Yes	Mode
Data collection and analysis should represent the second phase of the needs assessment process.	85	Agree Plus

Table 5.7 demonstrates that the vast majority of the respondents “agreed” to all but one of the sub-components to consider when conducting the *Data Collection and Analysis* phase of a needs assessment. Respondents (92%) “strongly agree” that data collection from a needs assessment should be analyzed/interpreted to help make programming decisions. On the other hand, 47% of the respondents had a neutral opinion about the importance of the establishment and utilization of an assessment team (See Table 5.7). Also of some interest was the finding that although 68% of the respondents “agreed” that *a good place to begin collecting data for a needs assessment was by considering indicators of unmet educational needs*, eighteen (21%) of the respondents felt “neutral” about this component (See Appendix A). Furthermore, it would seem to follow that there would be more “neutral” responses to the question addressing the *types of indicators of unmet educational needs*, yet there were only five (6%) responding with no opinion, and under the same sub-component, thirteen (15%) respondents did not feel that *indicators of unmet educational needs* was an important consideration in the category (See Appendix A).

Table 5.7: Cumulative Survey Results to Components within Data Collection and Analysis Phase of the Needs Assessment Model

Survey Questions	% Strongly Agree & Agree	No. of Responses	Mode
The data collection and analysis phase should include the following considerations.			
a. A good place to begin collecting data for a needs assessment should be by considering indicators of unmet educational needs.	68	84	Agree Mildly
b. Indicators of unmet educational needs should be potential participants, individuals such as experts, instructors, administrators, policy-makers and professionals who have knowledge about the educational needs of potential participants.	78	86	Agree Plus
c. Needs assessment should rely on one or more methods of collecting data to assess the needs of both individuals and group populations.	81	84	Agree Plus
d. An assessment team should be established and utilized when conducting a needs assessment	47	85	Neutral
e. Existing data such as potential participants or others that are familiar with the potential participants, organization records, publications about a specific audience and other pertinent information should be used when collecting data for a needs assessment.	84	84	Agree Plus
f. A needs assessment should utilize both qualitative and quantitative data.	84	86	Agree Plus
g. The data collected from a needs assessment should be analyzed/ interpreted to help the continuing education provider identify deficiencies in their programming as well as provide insight into decisions concerning audience, program content, format and delivery, and other pertinent information.	92	84	Strongly Agree

Telephone Interviews

Overwhelmingly, respondents felt that it was vital that when collecting and analyzing data in a needs assessment that the needs assessment team *utilize multiple or “mixed” methods and “triangulation.”* Respondents cited several ways to collect data including observations, document analysis, test results, face to face interviews (“a must”), surveys, phone surveys, focus groups and the Delphi Panel. The majority of the respondents believed that the *use of both quantitative and qualitative data* were necessary in gathering data. One respondent commented “guard against bias in both methods and questions.”. She stated that “bad data leads to very bad programming considerations, that can also be wasteful. It is also important to take time to state your survey or interview questions carefully, to avoid any bias. Know your subject or organization well before approaching them with questions about their educational needs.”

Another respondent stated that often difficulty exists in getting information about the potential student in a useable form. To get a better understanding for what subject matter his target audience is interested in he has established a location on his website where potential students can provide feedback and “chat” about their educational needs. To visit this website go to <http://www.fridaycenter.unc.edu>.

To the researchers joy, the majority of the telephone interviewees stated that they liked the *Data Collection and Analysis* phase of the study.

UTILIZATION OF NEEDS ASSESSMENT

The final component in the needs assessment model, *Utilization of Needs Assessment*, was addressed in the questionnaire in two parts. As with the other components, the first questions asked if *utilization of the needs assessment findings* represented the third phase of

the assessment process. Table 5.8 indicates that 82% of eighty-five respondents agreed that *utilization of needs assessment results* comprised the third phase of the process.

Table 5.8: Cumulative Survey Results to *Utilization of Needs Assessment Findings* in the Needs Assessment Model

Survey Question n=85	% Yes	Mode
Utilization of the data should be the third phase of the needs assessment model.	82	Agree Plus

Table 5.9 illustrates that the majority of respondents agreed with the four sub-components of the utilization phase of the needs assessment model. What is startling about these finding is that under each sub-component of the utilization phase there are respondents that either had no opinion (“neutral”) or “disagreed” with the *utilization of needs assessment results*. For example, ten (12%) respondents felt neutral about the *importance of utilizing the collected and analyzed data*, or the notion that the *results should be shared and utilized by all stakeholders*. Under this same sub-component, three (4%) of the respondents amazingly felt *utilization of the needs assessment findings* was of no importance (See Appendix A).

Table 5.9: Cumulative Survey Results to the Components within Utilization of Needs Assessment Findings

Survey Questions	% Strongly Agree & Agree	No. of Responses	Mode
Utilization of the data should include the following considerations. a. When conducting a needs assessment, someone should be designated to coordinate and manage the utilization of the assessment findings.	88	86	Agree Plus
b. Findings and conclusions from the data collected and interpreted should be shared and utilized by all stakeholders and others that would benefit from the findings reports.	85	85	Agree Plus

c. Results from a needs assessment should provide baseline data for making evaluative judgments regarding program impact and planning data for identifying ways to reduce the gap between current and desired educational needs.	86	86	Agree Plus
d. Needs assessment should be a continuous process, by which the findings will be shared by those that will derive the most benefit.	86	85	Agree Plus

Telephone Interviews

All of the respondents agreed that *utilization of the needs assessment* was the third phase of the process. Of the seven interviews, four of the respondents stressed the importance of *involving stakeholders* in the use of the needs assessment findings. For two respondents that work in a Continuing Education units, stakeholders included faculty and individuals in other academic departments. According to all of the respondents, sharing the needs assessment results with stakeholders helps to make “informed decisions.”

One respondent felt that it was “very good” to include a sub-component under this category to address *baseline data* for making evaluative judgments regarding programming impact and planning data for identifying ways to reduce the gap between current and desired educational needs.

Another respondent posited that this phase of the needs assessment required constant re-evaluation. It is important to “feed continuous assessment data back to the stakeholders.” “This helps to determine if the needs assessment is formative or summative. As continuous assessing occurs, change (hopefully positive change) takes place. These changes will affect the way the ‘system’ or organization operates. This change will also affect resources.”

Finally, a respondent suggested that one more component be added to this phase of the needs assessment to include “Action Plan.” This sub-component is meant to address questions such as “What are you going to do with the results?” and “Who is going to use the results?” and “Will the person assigned to disseminating the results have the appropriate professional standing to make sure the needs assessment findings get used?”

Summary

The remaining Tables 5.10 and 5.11 summarize the responses for the model in its entirety. Portions of these tables were presented as tables throughout Chapter V and are organized using the sub-components within the comprehensive needs assessment model. Table 5.10 demonstrates the cumulative ratings of importance of the sub-components within the model, as indicated by the respondents. Table 5.11 represents the revised needs assessment model offered by a telephone interview respondent. The bolded components represent the changes to the model. Table 5.12 is a summary of recommended changes to the needs assessment model in Continuing Education based on the survey and interview results.

Table 5.10

**Cumulative Survey Results of Needs Assessment Model
In Continuing Education**

Survey Question	* ³⁵ Total Responses	% Yes	Mode
The major components of a needs assessment in continuing education should include: a) planning purpose, b) data collection and analysis, and c) utilization of findings.	86	94	Strongly Support

³⁵ Some deans/directors of Continuing Education did not respond to all the categories.

<p>The planning purpose phase of a needs assessment in continuing education should represent the first phase of the assessment and include:</p> <p>a) specifying a needs assessment purpose, b) scope of the needs assessment, and c) determining what to assess.</p>	86	91	Strongly Support
<p>Specifying a needs assessment purpose should:</p> <p>a. be linked or guided by the parent institutions' mission, priorities, politics, etc.</p> <p>b. focus on content areas specific to a profession or activities unique to a particular group.</p> <p>c. identify the potential students levels of education.</p> <p>d. consider the educational needs of under-served populations.</p> <p>f. capitalize on the institutions' unique expertise in an effort to target populations.</p> <p>g. take into account the program delivery mode and scheduling preferences of potential students.</p>	86	86	Support Plus
	84	81	Support Plus
	86	74	Support
	86	70	Support
	84	80	Support Plus
	86	81	Support Plus
<p>The scope of a needs assessment should:</p> <p>a. determine which target populations to assess.</p> <p>b. engage a coordinator to manage the effort and keep it moving forward.</p> <p>c. seriously consider the resources available to conduct the assessment.</p> <p>d. contemplate the level of complexity of the needs assessment.</p> <p>e. establish a set of ground rules to follow while conducting the needs assessment.</p> <p>f. include a realistic timeline for each stage of the needs assessment.</p>	83	94	Strongly Support
	85	80	Support Plus
	85	94	Strongly Support
	83	88	Support Plus
	84	91	Strongly Support
	85	99	Strongly Support
<p>Determining what to assess in a needs assessment should include</p> <p>a. establishing priorities so that the focus of the</p>	85	93	Strongly

needs assessment is on identifying and clarifying areas of educational need.			Support
b. identification of the strengths and weaknesses of particular programming content areas.	85	78	Support
c. setting criteria or standards that measure levels of needs.	82	77	Support
Data collection and analysis should represent the second phase of the needs assessment process.	82	85	Support Plus
The data collection and analysis phase should include the following considerations.			
a. A good place to begin collecting data for a needs assessment should be by considering indicators of unmet educational needs.	84	68	Mildly Support
b. Indicators of unmet educational needs should be potential participants, individuals such as experts, instructors, administrators, policy-makers and professionals who have knowledge about the educational needs of potential participants.	86	78	Support
c. Needs assessment should rely on one or more methods of collecting data to assess the needs of both individuals and group populations.	84	81	Support Plus
d. An assessment team should be established and utilized when conducting a needs assessment.	85	47	Failed to Support
e. Existing data such as potential participants or others that are familiar with the potential participants, organization records, publications about a specific audience and other pertinent information should be used when collecting data for a needs assessment.	84	83	Support Plus
f. A needs assessment should utilize both qualitative and quantitative data.	86	84	Support Plus
g. The data collected from a needs assessment should be analyzed/ interpreted to help the continuing education provider identify deficiencies in their programming as well as provide insight into decisions concerning	84	92	Strongly Support

audience, program content, format and delivery, and other pertinent information.			
Utilization of the data should be the third phase of the needs assessment model.	85	82	Support Plus
Utilization of the data should include the following considerations.			
a. When conducting a needs assessment, someone should be designated to coordinate and manage the utilization of the assessment findings.	86	86	Support Plus
b. Findings and conclusions from the data collected and interpreted should be shared and utilized by all stakeholders and others that would benefit from the findings reports.	85	85	Support Plus
c. Results from a needs assessment should provide baseline data for making evaluative judgments regarding program impact and planning data for identifying ways to reduce the gap between current and desired educational needs.	86	86	Support Plus
d. Needs assessment should be a continuous process, by which the findings will be shared by those that will derive the most benefit.	85	87	Support Plus

Table 5.11

Revised Needs Assessment Model According to a Telephone Interviewee

Abridged Ideal Needs Assessment Model

Practical Ideal Categories	Research Methods	Evidence
I. Purpose II. Planning II. Data Collection & Analysis	Structured Telephone Interviews	What are the major components in a needs assessment model? What are the strengths and weaknesses of the needs assessment model.

III. Utilization of Needs Assessment		
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Expanded Ideal Needs Assessment Model

Practical Ideal Categories	Research Methods	Evidence
<p>A. Specifying A Needs Assessment Purpose Guided by mission, priorities, politics Define Content areas Understand Level of educational need Understanding educational needs of underserved populations <u>Specify population for educational needs</u></p> <p>B. Scope of a Needs Assessment Determine target populations Determine staff resources and method of coordination Resource availability Level of complexity Standards or human subject protections Timeline</p> <p>C. Determining What to Assess Determining audience preferences Short course offerings, day workshops, distance education, satellite conferencing, etc. Setting priorities Identifying content areas Delivery and scheduling preferences Profiling target populations Understanding of target populations Understanding the populations environment Understanding the target populations demographics Understanding the target populations level of education Determining what the target population is willing to pay for training</p>	<p>Structured Telephone Interviews</p>	<p>Based on the literature the first phase of a needs assessment typically has to do with “planning,” understanding the purpose of the needs assessment and is “exploratory” in nature. (Altschuld & Witkins, 2002)</p> <p>g. What components do you think belong in the first phase of a needs assessment?</p> <p>h. What are the strengths and weaknesses of the “planning purpose” of the needs assessment model.</p>
<p>II. Data Collection & Analysis Indicators and sources of unmet educational needs Individual versus group assessment Assessment team Selecting Appropriate Methods (combined = selecting methods and understanding various methods.) Combining techniques Utilizing existing data Utilizing quantitative and qualitative data Analysis</p>	<p>Structured Telephone Interviews</p>	<p>Based on the literature the second phase of a needs assessment typically has to do with gathering data or data collection and analysis.</p> <p>i. What do you feel are the components that belong in the second phase of a needs assessment?</p> <p>j. What are the strengths and weaknesses of the “data collection</p>

		and analysis” phase of the needs assessment model.
Utilization of Needs Assessment Authority to ensure use Stakeholders use of data conclusions Determine if baseline can be established by data Continuous assessment/evaluation	Structured Telephone Interviews	Based on the literature the third phase of a needs assessment typically has to do with utilization of the needs assessment findings. k. What do you feel Are the components that belong in the third phase of a needs assessment? l. What are the strengths and weaknesses of the “utilization” phase of the needs assessment model.

Table 5.12

Summary of Recommended Changes to Needs Assessment Model in Continuing Education

Abridged “Ideal” Needs Assessment Model

Practical Ideal Categories	Evidence Supports	Recommendations
I. Planning Purpose	Support	I. Purpose for Needs Assessment
II. Data Collection & Analysis	Support	II. Planning for Needs Assessment
III. Utilization of Needs Assessment	Support	III. Data Collection & Analysis of Needs Assessment
		IV. Utilization of Needs Assessment

Expanded “Ideal” Needs Assessment Model

<p>I. Planning Purpose</p> <p>A. Specifying A Needs Assessment Purpose</p> <ul style="list-style-type: none"> - Guided by mission, priorities, politics - Content areas - Level of educational need - Understanding educational needs of under-served populations - Targeting populations for specific educational needs - Delivery and scheduling preference 	<p>Support</p>	<p>A. Specifying A Needs Assessment Purpose</p> <p>Begin each category by asking “Where are we now and where do we want to be?”</p> <ul style="list-style-type: none"> -Guided by mission, priorities, politics -Define Content areas -Understand Level of educational need -Understanding educational needs of under-served populations -Specify population for educational needs -Establish milestones -Explore for opportunities as well as needs
<p>B. Scope of a Needs Assessment</p> <ul style="list-style-type: none"> - Target populations - Coordination - Resources - Level of Complexity - Standards - Timeline 	<p>Strongly Support</p>	<p>B. Scope of a Needs Assessment</p> <ul style="list-style-type: none"> -Determine target populations -Determine staff resources and method of coordination -Resource availability -Level of complexity System readiness, system capacity for change and individuals perceptions of system changes -Standards or human subject protections -Timeline
<p>C. Determining What to Assess</p> <ul style="list-style-type: none"> - Setting priorities - Identifying content areas - Setting Standards 	<p>Support</p>	<p>C. Determining What to Assess</p> <ul style="list-style-type: none"> -Determining audience preferences Short course offerings, day workshops, distance education, satellite conferencing, etc. -Setting priorities -Identifying content areas -Setting criteria -Delivery and scheduling preferences Profiling target populations Understanding of target populations Understanding the populations environment Understanding the target populations

		<p>demographics</p> <p>-Understanding the target populations level of education</p> <p>Determining what the target population is willing to pay for training</p>
<p>II. Data Collection & Analysis</p> <p>A. Indicators and sources of unmet educational needs</p> <p>B. Individual versus group assessment</p> <p>C. Assessment team</p> <p>D. Selecting methods</p> <p>E. Understanding various methods</p> <p>F. Combining techniques</p> <p>G. Utilizing existing data</p> <p>H. Utilizing quantitative & qualitative data</p> <p>I. Analysis</p>	Support	<p>II. Data Collection & Analysis</p> <p>-Indicators and sources of unmet educational needs</p> <p>-Individual versus group assessment</p> <p>-Assessment team</p> <p>-Selecting appropriate methods (Combined selecting and understanding various methods.)</p> <p>-Combining techniques</p> <p>-Utilizing existing data</p> <p>-Utilizing quantitative and qualitative data</p> <p>-Analysis</p>
<p>III. Utilization of Needs Assessment</p> <p>A. Coordination</p> <p>B. Stakeholders use of data conclusions</p> <p>C. Baseline data</p> <p>D. Continuous assessment and evaluation</p>	Strongly Support	<p>Utilization of Needs Assessment</p> <p>-Authority to ensure use</p> <p>-Stakeholders use of data conclusions</p> <p>-Determine if baseline can be established by data</p> <p>-Continuous assessment/evaluation</p> <p>-Action plan</p>

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

The purposes for undertaking this research were 1) to identify the ideal components for developing and implementing a needs assessment model in Continuing Education units of higher education; 2) to validate and refine the needs assessment model; and 3) to make recommendations for an ideal needs assessment model for use in Continuing Education units. In Chapter III, the major components and sub-components of the needs assessment model were identified. Chapter V presents the results of the components that belong in a needs assessment model according to the 86 responding Continuing Education deans and directors of institution of higher learning. This chapter will make the final recommendation on the ideal needs assessment model.

This chapter summarizes the results of the research conducted for this study compared to the comprehensive needs assessment model. The model identified in Chapter III can certainly be modified based on responses to the survey instrument (Appendix A) and the telephone interviews. Table 5.12 represents a summary of recommended changes to the needs assessment model based upon the results from the research methodology.

CONCLUSIONS

Table 5.10 provides the cumulative results of the survey and validates the three major components of the needs assessment model (94%). Respondents agree (91%) that *Planning Purpose* represents the first phase of a needs assessment and consists of *specifying a needs assessment purpose and scope and determining what to assess*. Of these three sub-components, issues such as *identifying the potential students level of education* (74%),

consideration for the educational needs of under-served populations (70%), identification of the strengths and weaknesses of particular programming content area (78%) and setting criteria or standards that measure levels of needs (77%) represent the lowest ratings under the *Planning-Purpose* phase. Although all other sub-components have an 80% or higher approval rating, these results are still considerably high.

Overall, the survey reflected the perceptions of the interviewees, however the *scope of the needs assessment* captured most of the dialogue shared by the interviewees. In sharp contradiction to the interviews, however, only 47% of survey respondents felt that *establishing and utilizing an assessment team* was of importance and a component of the *Data Collection and Analysis* phase of the assessment process. One reason for a “neutral” rating may be that respondents feel that the assessment team sub-component belongs under *Planning-Purpose*.

Another sub-component that is worthy of note is the notion that *a good place to begin data collection for a needs assessment is with indicators of unmet educational needs*. Only 68% of the survey respondents felt this was an important part of the collection and analysis phase of the needs assessment. Again in contrast, two of the interviewees expressed the delight to see that “indicators” were included in the *Data Collection and Analysis* phase of the needs assessment model.

Without question both survey and telephone interviewees agreed that *Utilization of the Needs Assessment* was the third phase of the process, and that all sub-components under this category were valid.

In Table 5.10, the overall mode of the major needs assessment components were “strongly agree,” or “agree.” Overall, every sub-component received the same ratings with the exception of *establishment and use of assessment team*, receiving a “neutral” response.

RECOMMENDATIONS

The needs assessment model was developed as a tool for Continuing Education providers to systematically use to explore the way adult students educational circumstances are, and the way they should be. Table 5.12 connects the recommendations to the practical ideal model based on the results of the study (recommendations are in bold). Although the survey and interview results did not produce any salient flaws in the needs assessment model, the only real way to know of the models success is to implement and use it. Needs assessment is a form of research, and as such, the Continuing Education provider that engages in needs assessment must commit the resources, personnel and time to see the process through. The reality may be that needs assessment is considered unnecessary, too time-consuming, cost intensive or other reasons that keep the Continuing Education providers from engaging in needs assessment. Of the 1552 Continuing Education deans and directors surveyed within the University of Continuing Education Association (the sample population of the survey), only 86 individuals from these institutions responded to the survey, and only five survey respondents requested a copy of this study’s results. Perhaps the following remark made by a Director of a Continuing Education unit at an institution in Oregon provides insight into the use of a needs assessment in Continuing Education.

I began to do the survey, but found it too long and too detailed, given my expertise in this area. We tend not to do much in needs assessment because we have found that no matter how much people say they want something, you really don’t know if they will come until its promoted with specific program details. So, we do less in needs

assessment now and spend more time developing a program and promoting it. If we get enough students, then we run the program.

Whether or not this comment reflects the opinion of Continuing Education providers on the use of needs assessment, the interviewee that revised the needs assessment model (see Table 5.11) made the point that “needs assessment is not as complicated as one would think. Reading the local newspaper for ideas on trends in the economy that can be transformed into beneficial adult educational activities is a form of needs assessment. Continuing educators probably engage in needs assessment more often than they think.”

Through needs assessment Continuing Education can provide a powerful way to improve the quality of educational activity for the adult learner. Furthermore, Continuing Education can use needs assessment to not only make significant improvements to the educational activities of the adult learner, but also enhance the institutions, organizations, businesses and other constituencies they represent (Inman and Vernon, 1997, p.75). If needs assessment becomes an integral part of continuing education program development, those educational activities that meet a specific goal or purpose or advance an organizational priority, have a greater chance at doing so through the utilization of needs assessment.

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